National Council of Educational Research and Training

National Institute of Basic Education

craft education in indian school system

CRAFT EDUCATION
IN
INDIAN SCHOOL SYSTEM

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FOREWORD

The study on 'Craft in Indian School System' was taken up by the National Institute of Basic Education in 1962. A study group under the Chairmanship of Shri J. K. Shukla, the then Director of the National Institute of Basic Education, was formed for the purpose. This important study was to be published long ago, but due to certain unavoidable circumstances there has been considerable delay in its publication for which we apologise. At a time when Educationists are thinking of linking education with productivity and for providing purposef l work experience for all school children at various levels, it is hoped, this status study wiil be of use in formulating craft programmes for our schools.

H. B. Majumder
Director

National Institute of
Basic Education,
D-14A/6. Model Town,
Delhi-9.

14th july, 1965.

PREFACE

There are no two opinions today about the important place of productive work in the educational systems of the developing countries. Curious children, wherever they are, always want to know and understand the nature of things and products used in their homes. In any good realistic educational system this curiosity is dovetailed into class-room experiences through a close and practical handling of tools, materials and understanding of processes and procedures. In our own country productive work experience has a special and unique importance in the context of our historical and sociological backgrounds. With the national awakening in the post-Independence period, the realisation of this need has reflected itself in the introduction of crafts or productive work in schools and organisation of many crafts and technical centres. The very concept and practice of Basic education pointed to the need for the introduction of crafts as an integral part of school curriculum even in the pre-independence period. The present study represents an attempt to survey the existing position of crafts in schools at diffeent levels. The study originated with an idea and a suggestion from Shri Raja Roy Singh, Jt. Director, in the National Council of Educational Research & Training, who also continued to direct and inspire the study through frequent discussions with the members involved in this work. The study was started with the formation of a Study Group consisting of the following members :

(1) Shri J, K. Shukla, Director, National Institute of Basic Education—Chairman;

(2) Shri B. S. Sehgai, Field Adviser, Directorate of Extension Programmes for Secondary Education-Member;

(3 Shri Abul Kalam, Director, Art Institute, Jamia Millia Islamia—Member;

(4) Smt. Gautmeshwari Shukla, Basic School, Central Institute of Education—Member;

(5) Miss Adarsh Khanna, Educationist, National Institute of Basic Education—Member-Secretary

The Study group was inaugurated on the 13th November, 1961, by Shri Singh, who explained the purpose and scope of the enquiry to the members of the Group. The members of the Study Group met in the beginning to work out the details regarding the scope and methods of the study. As some of the members were unable to work full time on the study and as persons from other institutions were not available the Chairman and the Secretary carried on the study with the help of some members of the staff of the National Institute of Basic Education. The study thus mainly represents cooperative effort of the staff of the National Institute of Basic Education. The undertaking of this study meant a great challenge to this Institute for it was required to be completed within a limited period of two months only and I am happy to say that it was carried out in a harmonious spirit of excellent team work.

It is hoped that the study will provide a valuable basic reference material for planning craft education in the schools of the country.

J. K. Shukla
Chairman
Study Group

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CHAPTER I

INTRODUCTION

With the attainment of independence, increasing demands are made on the individual's social and personal efficiency. He must be better equipped technically, and he must be better qualified to assume responsibility for building up democracy and self-government in the country. Education being the most vital means of helping the individual to come up to these demands, has been receiving greater and greater attention. It is realized that the Indian education must be increased in range and improved in quality. It is also realised that the purely literary system of education prevalent in schools and colleges would not be enough to equip our youth with the knowledge, scientific skills and character qualities which are basic to the formation of any sound nation.

Looking to the psychological needs of the children and the social needs of the country, several types of changes were suggested. An important trend among these changes was towards the introduction of some kind of hand work or manual labour in the schools. At present we find that handicrafts are taught as a compulsory subject in all the primary and middle schools, being run on the Basic pattern. Crafts also form a compulsory or an optional subject in the non-Basic primary and middle schools in many States. Recently in the multi-purpose scheme for higher secondary schools craft has been included as one of the core subjeats Even in the ordinary higher secondary schools some of the States have introduced crafts. In order to take further steps to introduce and organise this subject effectively, it is essential to survey the existing position and practices in our school system. Any scheme of improvement will have to be guided by our experiences and experiments in this field The present inquiry has been undertaken with this aim in view. It attempts to study the movement of craft teaching in education in general and particularly in Indian school system. An attempt is made to study the historical importance of craft, the objectives, standards and practices of craft education through (i) the analysis of the school syllabii followed in different States ; (ii) information supplied by the State Departments of Education and some non-official organisations in response to a detailed questionnaire (a copy of this questionnaire is given in appendix (IV) ; (iii) analysis of 730 responses received from the secondary schools of different States in response to a questionnaire (for copy of the questionnaire, see appendix III) ; (iv) study of the official progress reports and reports of the various educational committees appointed from time to time.

It it appropriate here to mention some of the limitations of the study. I has been conducted in a very limited period of two months only. The limitation on time and the vast and varied scope of the study have presented many challenges. Moreover, no systematic study of similar type has ever been made before. Material for this report had, therefore, been selected from a very limited literature available to us and some information supplied by the State Departments of Education and the secondary schools in the States. An attempt was made to get the latest information about each State through the circulation of a questionnaire. One problem in interpreting responses to this questionnaire was the difficulty of knowing how far the factual position revealed can be accepted generally in regard to the actual practice. Syllabii of elementary and secondary schools which were available in the library and which were received from the States were used for analysing the position and practice of crafts as a school subject. This source of information is again fallible because of the hazards in inferring from the syllabii the actual position obtaining in schools. The questionnaire for secondary schools was sent by the Directorate of Extension Programmes for Secondary Education some years ago. Whether or not the responses are descriptive of the present, is not certain. Again, the representativeness of the sample of the schools which sent the replies to the questionnaire, is questionable. Moreover, the nature of some of the questions precluded a precise analysis. Exact figures in some cases proved to be more misleading than reporting the general trend indicated by the data. Some of the 'yest' 'no' or multiple-choice items seemed to provide a built-in and almost irresistible temptation to check one of the answers. An open-ended question for example might have brought out more valid information regarding the objectives of craft-teaching than a structured question with 10 objectives to be checked. In the latter case it seems fair to suggest that the respondents might have been tempted to check some of the good sounding objectives.

Some questions in the questionnaire seemed to convey different meanings to different respondents. For example, question No, 10 on the size of the craft-class has been interpreted by some respondents as enrolment size in a class-room and by others as the size of the room. Some schools interpreted "internal assessment" (item 48) as the assessment made with the help of the records, and external assessment as that done by examination. Some schools considered internal assessment as that made by the school staff and external assessment as that made by an outside agency. Questions 8, 11, 13 and 14 also involved some ambiguities.

Some of the multiple-choice items were not exclusive of each other. For example in question 47, the first alternative "maintaining a recoord of pupil progress" may include the other three mentioned after it. in fact "maintaining a record of pupil progress" could be alternated with "by examination." In such cases the interpretation of the response becomes difficult and exact figures implying precision are misleading.

Some questions asked for information which the schools may not be in a position to provide. Question 32, which asked for information about the qualifications of the teachers in the schools, is an example.

The terms used in some of the questions such as teachers' file of material, pupils' collection of craft designs and materials, internal and external assessment should probably have been precisely defined.

Limitations such as above are bound to occur in a pioneer study of this type, especially when the scope of the study and limitations of time preclude what might be a more valid experimental/observational approach. The study does, however, give a general picture of position of crafts in our school system. Information has been obtained and analysed in terms of :—

1. Basic primary and middle schools ;
2. Non-Basic primary and middle schools ;

3. High schools ;
4. Higher secondary schools;
5. Multipurpose schools ;
6. Post-Basic schools.

The present report is divided into nine chapters. The first two explain the background of the study and the importance of craft in education. The third chapter is a historical survey of crafts in the Indian school system. This chapter also summarizes information from the reports of various committees and educational bodies of the country which have, from time to time, expressed opinions regarding the place of crafts in schools. The fourth chapter, which gives the position of crafts in Indian schools, has been divided into two parts—one dealing with the position of crafts at the elementary school level, and the second with the position of crafts at the secondary school level. This chapter is mainly based on the analysis of the syllabii followed in the several states, the analysis of the responses to the questionnaire administered to secondary schools of various states and the information supplied by some of the State Departments of Education and some non-official organisations in the States in reponse to our questionnaire. Chapter five is again divided into two parts. Five (A) gives a state wise account of craft work in elementary schools as revealed from the analysis of the elementary school syllabii and the proforma sent to the States. Five (B) gives the state wise reports prepared from the analysis of the responses from secondary schools. Chapter six gives some idea of the facilities for the training of craft teachers in the country. This information has been obtained from some Departments of Education, individual craft lecturers, teachers and craft training institutions.

In chapter seven an attempt is made to study the administrative and organisational aspect involved in connection with the teaching of craft. Chapter eight gives a brief picture of the position of crafts as obtaining in the U.K., the U.S.A. and the U.S.S.R. It is hoped that chapter eight may be useful in evolving a good plan of craft education for our schools. The last chapter *i.e.* chapter nine is again divided into two parts. Part I summarises the conclusions that follow from the studies made in the previous chapters. Part II contains recommendations to be implemented at various levels. These recommendations have grown out of the study and are presented in the hope that effective steps would be taken to put them into effect.

The data collected for this report, has been presented in 37 tables, a list of which is given in the beginning. Six appendices have also been given at the end of the report which include the tools used in this study and the lists of the elementary school syllabii and the secondary school syllabii.

CHAPTER 2

CRAFTS IN EDUCATION

I. Importance of Crafts

Man's power over nature results, in large measure, from his use of tools. For this reason, handicraft has always been of vital significance in the history of mankind. It is said that culture had its inception when man learned how to make fire. As he slowly acquired the ability to devise simple tools and use them for meeting his needs of daily living, his hand became the servant of his mind to form a harmonious partnership in the process of living. It was some Greek philosopher who realised this relationship when he stated that man learnt to use his hands and then became intelligent. H. G. Wells emphasised the same thought in a different way by saying that "fundamental instinct of life is to create, to discover, to make, to grow, to progress." It is now almost axiomatic that if man's capabilities have to be realised in full measure, it is necessary that the hand and the mind form a co-ordinated, unified, interacting entity.

Handicraft is, perhaps, the only school subject which took root long before the beginning of academic subjects. In part, because of its antiquity, beginning from the birth of civilisation, handicraft affords a rich source of education and understanding of the past traditions and heritage as well as a basis for projections into the future of living. Since crafts are a fundamental human activity, it is possible that their practice may help to promote international relationships on a humane and fundamental basis, irrespective of any frontiers of climate, cultural traditions or even prejudices. They involve the manipulation of raw-materials, which have inherent common characteristics throughout the world.

The teaching of crafts has a special significance today when we emphasise 'education for democracy'. Education for democracy implies, in its broadest sense, attempts to impart the heritage of the ages and also, to prepare the young for purposeful, active and participating membership in their society. The teaching of crafts in education makes important contributions towards achieving both these goals. It also provides an outlet for the creativity, which has characterised man's development and advancement. Handicrafts can provide a natural medium through which the skill and dexterity, aesthetic appreciation and social customs and values of a generation might be passed on to a subsequent generation. Finally, it serves one of the most important means of imparting and interpreting the essence of the development of our modern civilization.

II. Some Educational Theories & Craft Teaching

Many early teachers and philosophers have written to glorify the importance and the value of arts and crafts and manual training in education. Aristotle emphasised the importance of drawing by pen or pencil, for enabling man to judge substance, form and fashion in buying things which are durable, handsome, delightful and pleasant. Cominius thought that "children should learn the most important principles of the mechanic arts, both that they might not be too ignorant of what goes on in the world around them and that any special inclination towards things of this kind, may assert itself with greater ease later on." Rousseau revealed his thoughts on the value of practical work in the schools when he said, "If, instead of making a child stick to his books, I employ him in a workshop, his hands labour to the profit of his mind, he becomes a philosopher but fancies he is only a workman." Rousseau further pointed out that "the great secret of education is to make the exercise of the body and the mind serve a relaxation to each other." He claimed that Emile "will learn more by an hour of manual labour, than he will retain from a whole day's verbal instructions." Pestalozzi, referring to his work and teaching, said, "I tried to connect study with manual labour, the school with the workshop and make one thing of them." He further stated, "I am more than ever convinced that as soon as we have educational establishments combined with workshops on a truly psychological basis, a generation will necessarily be formed, which on the one hand will show us by experience that our present studies do not require one tenth part of the time or the trouble we now give to them." Herbart emphatically stated that "every growing boy and youth should learn how to handle the recognised tools of the carpenter, as well as the ruler and the compass. Mechanical dexterity would often be more useful than ability in gymnastics. The one helps the spirit, the other the body. Elementary schools should have workshops, though they should not actually be technical schools. And every man should learn how to use his hands. The hand holds the place of honour at the side of the power of speech, in raising man above the beast."

The theories developed by these educators and their contemporaries influenced the development of educational systems in Russia and Sweden and their practices affected the U.S.A., England and other countries.

III. Trends in Different Countries

In Russia, practical education was introduced during the second half of the nineteenth century by Victor Della Vos, who analysed the processes of the mechanic arts, breaking each down into a series of logical steps. He developed the analytical technique as a means of determining the fundamental processes and therefore the things that should be taught. In his system, the students made a series of models or exercises as means of learning the fundamental operations. Before a student was permitted to construct a useful object, he was expected to master the processes, step by step, that would go into the construction.

In the Scandinavian countries, the use of hand tools, to make useful objects for the home, was a traditional home craft (Hus Sloyd), which was being neglected. In order to realize the many contributions handicrafts can make to the optimum development of children, a system, called "Sloyd training", was introduced in the primary schools. Through the construction of a series of articles of wood of increasing complexity, it was expected that desirable habits and attitudes of work would be formed. At the same time the development of necessary skills for entering further apprenticeship training would be ensured. Such work was also intended to develop initiative and aesthetic appreciation while providing a change from other studies.

Uno Cygnaeus in Finland and Otto Salaman in Sweden led the movement to utilize Sloyd as an instrument of education. Salaman opened a Sloyd school at Naas in 1868, where instruction was centred on the making of useful objects. His objectives were amazingly similar to those, usually accepted as the objectives of general education today. The methods adopted by him aroused the interest of teachers, and his book "*The Teachers' Handbook of Sloyd*", which was later translated into English and other languages, helped to spread the movement for recognising the practice and study of craft as an educational subject. The Swedish emphasis was on a system of manual and mental training, based chiefly on carpentry. In the beginning, manipulative processes were emphasized. Educational authorities, throughout the world, were attracted to this system and many teachers from other countries took a six-week course at Naas. As a result, handicraft was firmly established as a school subject in Sweden.

There were several significant differences between Sloyd and the Russian system. In Sloyd the students learned the tool operations while working on useful projects. In contrast, the Russians emphasized making of the models and typical joint exercises. In the Sloyd training, it was usually not possible to handle large classes as the Russian Della Vos could do with his system. The Swedish development stressed interest, individual differences and small group instruction. As Sloyd classes became very popular in some sections of the country, arguments with the advocates of the Russian system were common when discussing the best approach to the teaching of manipulative subjects. These two systems, the Swedish and the Russian, dominantly influenced the teaching of industrial education for some time, although other forces were soon to appear and give breadth and depth to this new area of the curriculum.

Sloyd training spread in England with the establishment of the Sloyd Association of Great Britain and Ireland. Samuel Barter, when appointed as Organizing Instructor of Manual training in the elementary schools of the London County Council, brought out two publications viz., "Manual Training" (1892) and "Drawing" (1896), indicating the purpose and scope of manual training. These publications showed a real advance over the Swedish system. A third book, "Elements of Handicraft and Design" (1893) by W. A. S. Benson, was considered an outstanding book of the period. According to these publications manual training was firmly established on the basis of mechanical efficiency in practical work and accuracy in drawing. Particular stress was laid on the training of hand and eye.

In the early stages, English educational authorities were not unanimous in accepting, much less praising, manual training, as a school subject. Manual training centres, in which instruction was given, were built on school grounds and thus over a period of many years the practice of the subject grew and spread to Secondary, Grammar and Public schools. Manual training, prior to the first World War, was rather loosely described as Handicraft and the term was applied to various forms of hand and eye training in paper, cardboard and other materials, not directly associated with any historic craft. It was only after the First World War, that the subject was placed on a definite craft basis so that the rich heritage of British crafts with their historical, artistic and cultural value was brought into the schools.

The Sloyd and the Russian system combined to become manual training in the United States. St. Louis-Missouri was among the first cities to open a Manual Training School (1879) with one of the main objectives being "to train the head and hand." By 1871, manual training was developed quite generally throughout the United States. The earlier manual training used exercises borrowed from Russia. As Sloyd became more and more influential, however, the production of useful objects became important and manual arts replaced manual training. Today the manual arts approach, with emphasis on projects, still continues.

The basic theory of modern advocates of handicrafts is influenced by the principle of "learning by doing". John Dewey in his "School and Society" (1899) echoed Plato, Rousseau, Pestalozzi and Froebel when he emphasised the fact that people learn by doing. He wrote further that "we must conceive of work in wood and metal, of weaving, sewing, and cooking, as *methods of life* ; not as distinct studies........................ but as instruments through which the school itself shall be made a genuine form of active community life."

About 1909, F. Gordon Bonser and Dean Russel of Teachers' College, Columbia University, were influential in the development of broader concepts of industrial arts, and the "general shop" idea began its development. The intention was to keep all of the old that was good, but to have the entire field of industry as a basis for the manual work rather than manipulative activity from a few specialised fields. Since that time the development of the industrial arts, as an area of general education has paralleled closely the rise of the junior high school in the U.S.A. With the junior high school emphasizing broad orientation and exploration, industrial arts began to "call for a diversity rather than a specialisation of skills."

In the whole movement from manual training to industrial arts, the fundamental concept remains in tact ; that children learn best through active participation in concrete experiences concerned with the phenomena of their physical and social environment. In Industrial arts, the belief is that the basic principles of electricity would become real and meaningful to the child in the process of constructing a simple door-bell circuit or a crystal radio. The understanding of the child is developed effectively when he is engaged in thinking about doing and actually doing. In the past fifty years or so, the accent has shifted from the *manual* of manual training to the manual *arts* and again to the industrial arts.

Thus the practice of Sloyd work in Sweden and instruction and construction through ordered exercises in Russia, led to the concept and practice of manual training. In England, there was special emphasis on the practice and study of craft work and craftsmanship and on their historic, artistic and cultural values. The same idea led to the development of the concept and practice of "industrial arts" in the U.S.A, and to "polytechnization" in the U.S.S.R.

IV. Clarifying Concepts and Practices

In order to understand fully the modern developments and practices followed in the different parts of the world, it is necessary to clarify the different meanings attached to similar words. This is all the more desirable because of a tendency to confuse craft work with terms like "manual training", "manual arts", "practical arts", "manual education", "shop work", "hand work", and "industrial arts". There is general agreement that *craft* involves the idea of skilled work in materials. Hand work in education involves the idea of manual dexterity, of manipulation and the development of hand-and-eye-coordination. Industry refers to "the whole complex of raw material, machinery, processes and products, within which the craftsman may or may not have a place." The term 'industrial arts' which is commonly used in the U.S.A., was introduced in the earlyl decade of the 20th century. As a substitute for the term, 'manuay training', it suggested that "we are rapidly leaving behind the purelis disciplinary thought of manual training" and enlarging the scope of tha- work to include the industries which are fundamental to modern civilizin tion. The term 'manual training' and 'manual arts', as practised he earlier schools had quite a different connotation. In manual training the emphasis was on the manual side and the usual procedure was for tal student to make a series of models or exercise-pieces. The term 'manual arts' came to be used in respones to the criicism levelled against manual training that it did not pay attention to the art and design possibilities inherent in the subject. In manual training the emphasis was on the manual; in manual arts the art aspect was stressed. In industrial arts the emphasis was on industry and industrial life. The United States Office of Education Committee on Industrial Arts defined the term as follows :—

"Industrial arts is a phase of general education that concerns itself with the materials, processes and products of manufacture, and with the contribution of those engaged in industry. The learning comes through the pupil's experiences with tools and materials and through his study of resultant conditions of life. It is curriculum area rather than a subject course, being comparable in this respect to the language arts.

"Industrial arts, therefore, has general values that apply to all levels, and in a continuous programme these values are progressively intensive and cumulative in their effect as the pupil advances in maturity. Through such a programme the pupil :

1. Gains knowledge of the changes made in materials to meet the needs of society, of tools and industrial processes used to effect these changes, of the constant adaption of materials, tools, and processes to meet changing needs and conditions, and on industrial workers and working conditions.

2. Acquires an appreciation of the value of information regarding occupations as a background for a wise choice of a career, of the importance in modern life of tools and industrial processes, of the artistry of the designers and the skill of the artisan, and of the dignity of productive labour.

3. Increases his ability to plan constructive projects, to select and use sources of industrial and related information, to handle tools and materials, to express with materials his individual interest, to use effectively his recreational time, to work and share as a member of the group and to evaluate work and its products.

4. Develops attitudes of concern for safety practices, of consideration for workers in all fields, of regard for co-operation among the members of a group, and of respect for property."*

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* Industrial Arts, Its Interpretation in American Schools, p, 1, Bulletin, 1934, No. 34. Washington : Government Printing Office, 1938.

V. Place of Crafts in School Curriculum.

What is said about industrial arts is true, to a great extent, of crafts in education. The practice of crafts has a special significance in the modern world, as a means of transforming our social environment by forming aesthetic taste, relating the creative urge of the child to the material world, making knowledge concrete and practical, building up character and sensibility. The use of tools in the craft work and the manipulation of raw materials help children in acquiring a sense of responsibility, economy and precision and what is more important, wisdom in selection and choice of materials as well as the judgment, necessary for mature understanding and appreciation. The process of education implies that every child would be helped to understand and interact with persons and things in his environment. Part of the importance of craft lies in its concern with the relationship of man to things. It thus fills a unique place in the school curriculum. Rt. Hon. R. A. Butler in his address to the College of Handicraft in April, 1957, asked this significant question : "What are the virtues of handicraft as a general subject in the curriculum ?" In his attempt to answer this question he pointed out that the practice of handicraft leads to three kinds of training. "There is in the first place the training which comes from the discipline of exact work in a defined medium. A pupil has to use intractable materials, to accustom himself to adjusting his methods and demands to the limits set by the nature of his material. He has to learn the correct use of tools and to appreciate the value of accuracy and exactness. Many subjects of study are commended as disciplines. Handicraft, too, is a discipline, with its own requirements and its own lessons.

"The second field of training lies in the development of physical capacities. I am told that the hand centres in the brain have their most active period of development from the fourth to the fifteenth year and that the training, boys and girls receive in these years has a most important effect on the degree of their manual efficiency afterwards. I am sure that we must not underestimate the importance of training which helps to develop a fine point of physical control and coordination. The other kind of training which I have in mind is that in taste. Handicraft can make pupils alive to the essentials of good design and can play an important part in the development of good taste.

"These three kinds of training handicraft can give to any boy. I do not think that they represent, by any means, the limits of its value as a school subject. Quite apart from the skills actually acquired, handicraft can, I think, when taught with an appreciation of the potentialities, be the most useful medium of general mental training."

VI. Significance of Crafts in Education

Crafts have acquired great importance in educational programmes during recent times. Though crafts have been practised since the beginning of human existence, their value for the child's education was recognised contemporaneously, with the development of modern psychology. It is being increasingly realised that crafts provide suitable media for the child to develop self-expression, discipline as well as familiarity with raw materials, tools and social realities.

Several studies have made statements intended to establish the contribution that craft and other productive work (manual work) make towards the development of human brain. The observations of Saunders, a psychologist, are worth noting in this respect. "The progressively higher development of the brain depends on establishing connections between the motor and sensory centres, the practice of manual work aiding so effectively in developing these highly specialised complex centres that it leads finally to brilliant intelligent and a well-balanced mind. Progressive manual work for children from four to fifteen is thus not time lost but constitutes, on the contrary, the true and the only procedure for normal development, since it opens up indeed the only road which Nature herself attempts to lead the child."

The teaching of crafts gained importance because of the realisation of the need of "training the senses". "Until we are prepared to encourage the development of the senses as much as we now do the intellect, the mental activity of imagination as much as we now do memory...... until then, our talk of educating the whole man is an eye-wash".[1] Craft work gives the child opportunities of using his hands and other sense organs as a result of which he gains rich experience. Gandhiji, explaining his scheme of education through crafts, said, "My point is not that the start should be made with crafts and the rest should come in as auxiliaries. On the contrary, I have said that the whole of general education should come through the crafts and simultaneously with their progress."

Various claims have been made with regard to the place of crafts in education. Some of these claims may tend to appear rather extravagant, leading to an expectation not supported by actual practice. However, the report of the International Bureau of Education on the teaching of handicrafts mentions, "Practically every country replying to the inquiry agrees that the prime aim of handicrafts may be given in terms of their educational value. The subject is accorded an essential part in the forming of character and the education of the will. It demands attention, concentration, perseverance, accuracy and method, and creates habits of orderliness, neatness, precision and foresight."[2] In addition, the report argues that handicrafts are introduced for developing wholeness of personality, team spirit, respect for manual work, awareness of beauty, satisfaction of creative urge.

In one of the latest reviews of the educational situation in the U.S.S.R. a Soviet educationist, while pointing out the spots where improvement is needed, has remarked, "In classes 1 to 7 the time allocated for practical work and agriculture must be increased." On the basis of the reports received from various schools and teachers, the same author observes, "The participation of the pupils in productive work whether in industry or agriculture, has a tremendous effect on strengthening discipline and stimulates interest in the studies." As Mahatma Gandhi observed, "Literacy itself is not education. I would, therefore, begin the child's education by teaching him a useful handicraft and enabling him to produce from the moment he begins his training."

It would be possible to continue, almost indefinitely, citing evidence for the educational significance of crafts. Their importance in Basic education in India, is recognised by giving them a central place in the system of elementary education and using crafts as a basis of correlation of knowledge. "Let us now cry a halt and concentrate on educating the child properly through manual work, not as a side activity, but as the prime means of intellectual training," said Mahatma Gandhi. His famous declaration : "My plan to impart primary education through the medium of village handicrafts like spinning and carding, etc., is thus conceived as the spearhead of a silent social revolution fraught with the most far-reaching consequences," indicates the importance to him of the experiment. The essence of Basic education can be summarised in the words of Mahatma Gandhi : "It means a new educational technique where progressive self-reliance in all respect of a healthy and balanced life—economic, physical, social, moral and cultural—forms the medium of education; and the necessary knowledge of subject matter is given, habits and attitudes formed, and faculties developed, through this process." In Basic education, "productive work should not only form a part of the school curriculum—its craft side—but should also inspire the method of teaching all other subjects."

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[1] Robertson, S.M. *Creative Crafts in Education*. London : Routledge and Kegan Paul Co., 1955.

[2] *The Teaching of Handicrafts in Secondary Schools*. Geneva : International Bureau of Education, p. 12, 1960.

Handicrafts now occupy an important and central position in our educational system. Their great value as an educational means and end is no longer disputed. With the acceptance of activity methods in the field of primary education craft activities became important. The adoption of Basic education as a national system of education for the age-group of 6 to 14 has strengthened the case for the teaching of crafts in the school system. Their adoption as one of the core subjects at the secondary school stage which had long traditions of purely academic and bookish approach—has revolutionised the outlook in education and created problems of content and techniques of teaching which demand urgent solution. In one of the studies on "Measuring Educational Potentiality of Crafts", the National Institute of Basic Education has posed the question : "To what extent each of these crafts may be expected to arouse and sustain the interest of school children ; the extent to which academic knowledge can be imparted through each of them ; the extent to which each craft could be spread over the various grades in their gradually increasing difficulty and complexity ?" Educational potentiality of a craft, according to this study, is taken to mean "the educational value of a craft for being used as the medium of child's education" and is broken into several factors which constitute the dimensions of educational potentiality. The final list of factors constituting educational potentiality of crafts, as accepted by this research project are listed below :

1. The capacity of a craft to sustain interest of pupils.
2. The capacity of a craft to satisfy the curiosity about ways of making and producing things.
3. The capacity of a craft to arouse interest in gaining knowledge.
4. The capacity of a craft to help the physical, mental and moral development of the child.
5. The capacity of a craft to extend to the entire syllabus and to correlate knowledge with its various processes.
6. The capacity of a craft to serve as a natural meeting-point of the physical and the social environments.
7. The capacity of a craft to provide group work.
8. Richness and variety of processes involved in the craft.
9. The grading potentiality of a craft.
10. The capacity of a craft to help the aesthetic development of the child.

It will be seen from this study that the educational potentiality of crafts is one of the significant factors claiming their adoption in the school curriculum.

In another brochure entitled *"Basic Activities for Non-Basic Schools"*, some of the aims of craft activities as mentioned below have been described. These aims together amply bear out the value of crafts in education :

1. To train the eye and the hand to their best use.
2. To create love for work ; work done with skill and ease gives enjoyment.
3. To stimulate habit of attention to details through craft work.
4. To help the growing child to learn that anything done the right way with a right motive, is of much value and worthy to be regarded highly.
5. To train the child to avoid slovenly and careless habits of work and to develop love for order and neatness.
6. To stimulate self-reliance.

The use of craft and productive work as the medium of education is being increasingly recognized and stressed in other countries also. The report of the International Bureau of Education has indicated that crafts "are highly valued as a means of presenting the content of other subjects in a concrete form". A circular of Argentenian Ministry of Education stresses the importance of craft as "an instrument of illustration and demonstration of all subjects." The following quotation from this recent publication indicates the degree to which the importance of crafts and pruductive work is being realised. "How far should practical work, and the informational subjects too, for that matter, be treated as a vehicle for teaching the basic tool subjects ? But there is no reason at all why they should not accept the importance of the approach to these skills through their practical subjects, and having accepted it, be on the watch to use every opportunity for putting it into effect. Now the craft becomes the focus and the informational material is related to it."

The significant value of crafts in education is borne out by the facts revealed by the Geneva Report of 1950 (See Appendix III). From the data collected from 40 countries the following facts were revealed about the crafts taught in secondary schools.

Wood Craft : This has been included in the curriculum of 75% of the countries.

Metal work : 58% of the countries teach it.

Bookbinding : 33% of the countries teach it.

Agriculture, Gardening or Farm Mechanics : 10% of the countries teach it.

Leather Work : 10% of the countries teach it.

Weaving : This is generally a craft for girls. 20% of the countries follow the craft.

Needle work : This is followed in girls schools and 70% of the countries teach it.

Domestic Science : This craft is meant for girls and 40% of the countries teach it.

Miscellaneous : In addition to the above mentioned crafts many other crafts are taught in different countries e.g. stencilling, lino-cutting, modelling, pottery, basketry, cooking, food preservation, tailoring, use of plaster and cement. Some countries also teach electric installation, machinery work, preparing model aeroplanes and physics apparatus, as a part of handwork training programmes.

VII. Difficulties in the doption of Crafts in Schools

Even though the vital importance of craft in the process of education has been generally recognized, there have been various difficulties in the way of adopting its teaching in the school system.

(i) One of the most obvious difficulties is the belief among a section of people that manual work should be altogether avoided in the schools. This belief is based on an attitude towards life and has its roots in the Greek conception of life and happiness. The Greeks felt that all handicrafts as such were the work of slaves. A true citizen, according to Greek conception, "must not lead the life of mechanics of tradesmen, for such life is ignoble and inimical to virtue." Toil robs a man of leisure that is indispensable "to the development of virtue and the performance of political duties." The compatibility of a life of toil and hardship with the highest satisfaction and perfection was unthinkable to the Greek.

(ii) This sort of belief led to another difficulty, that of associating practical work with trade or vocation. This led to what may be described as "desk-approach" in the education of children. The "desk-approach" was considered to be incompatible with trade and vocation. The emphasis on hand-work in crafts has led to the erroneous belief that training of the mind is quite different from manual or manipulative dexterity or training of the hand or hand-and-eye.

(iii) Further a question arose as to why craft should at all be taught in an age of machine civilzation. In an answer to this question Miss Seonaid Mairi Robertson* has pointed out at length that there is no essential antagonism between the acceptance of the machine age and acceptance of craftsmanship. She dwells at length on three fundamental reasons which may be reproduced in her own words as under :

> "It is from no romantic retrogressive attitude that I say I believe we need craftsmanship in this 'machine age'. I say, we need it for three reasons :
>
> 1. We need the occasional devoted artist-craftsman giving up his whole life to work at his craft, because craftsmanship embodies certain values and a depth of direct understanding of materials possible only to those who spend most of their lives pursuing and exploring that relationship. Just as we need pure scientists, musicians, poets, mystics, we need pure craftsmen, so that the growing-points of certain aspects of our culture can feel their way farther, and that those of us who

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* Seonaid M. Robertson. "*Creative Crafts in Education*" Routledge & Kegan Paul, London, 1952

Seonaid M. Robertson. "*Craft and Contemporary culture.* UNESCO, Harrap, 1961 spend our lives in other ways can ultimately benefit by the illumination of their experience and delight in their productions.

2. We need craftsmanship because these very machines are now, in the occidental world, reducing the hours of work so drastically that the problem is how to spend the resulting leisure time. Unless people are to be left at the mercy of passive forms of entertainment they must be helped to recreate themselves through some form of recreation. As the present "industrial counter-revolution" and the raising demand for craft classes and "do-it-yourself" movements testify, craft offers this satisfaction at whatever level any person is capable of achieving, because it is a fundamental activity rooted in man's nature.

3. We need craftsmanship in education, in a machine age as much, if not more, than any other, because it is a fundamental mode of education, through which the child explores, discovers the qualities of, and comes to terms with the world in which he lives. Craft develops personal qualities through this relationship with the material, leading the youngster not only to self-expression but to an understanding of the 'otherness' of the physical world, which he must honour if he is to create in its substances. In addition, craft embraces much of that other side of education, the induction of a human being into his culture, for he meets, not in books, but first hand in actual objects so many of the values inevitably embodied in buildings, the utensils the treasures handed on. And each generation must make explicit its own values in contemporary forms."

(iv) Finally, the progress of handicraft teaching has been, on the whole, slow because of its expensiveness. In India, especially, the financial implications of craft teaching with its demands on raw-materials, equipment, tools, workshop facilities and specially trained teachers—has led to unusually slow progress of Basic education. The hope, that craft teaching could be largely self-supporting through the sale of craft products, has not materialized and officially it has been abandoned.

(v) There are also plenty of other administrative problems like lack of well-qualified and suitable craft-supervisors or inspectors, lack of adequate administrative machinery to deal with problems of supply of adequate materials and tools, arrangements for repairs and replacements, records for keeping accounts for craft work, evaluation and assessment procedures for craft work and refresher training for craft teachers.

CHAPTER 3

A HISTORICAL SURVEY OF CRAFTS IN INDIAN SCHOOL SYSTEM

I. In Ancient India

Handicrafts are one symbolic expression of India's great traditions and cultural heritage. Many instances of Sanskrit, Buddhist and Jain literature contain references to the 64 Kalas which pertain to ancient arts and crafts in the traditional sense of the word. The Jatakas were the first to differentiate between religious and literary works, such as the Vedas or the Humanities, and the *Shilpas* proper which indicated a craft or vocation based on practical skill. One Jataka actually mentions 18 crafts organised into guilds some of which are those of "masons, blacksmiths, carpenters, painters, men skilled in all arts and crafts."*

The practice of arts and crafts seems to have acquired such proportions that Kautilya in his *Arthshastra* refers to the various departments of industry, craft or trade. This organisational perfection shows to a great extent the scope and progress of arts and crafts during the time of Chandra Gupta Maurya (323-299 B. C.). During the Vedic society, agriculture and carpentry were highly honoured and the extraordinary skill in manual crafts was deified. It was much later when the caste superiority of Brahmins and Kshatriyas was proclaimed and those who followed manual crafts and handicrafts came to be held in low esteem. In ancient times, training in arts and crafts was imparted by a rigorous system of apprenticeship. Altekar describes the apprentice as being required to live in his teacher's house for all the 24 hours. "This was to ensure a thorough acquaintance with and grounding in the different processes of the craft that could be picked up only by an intimate and prolonged contact with the various stages of the manufacturing processes. Students were also trained to make their own tools in order to ensure perfect mastery of the profession."

All this shows that craft education in ancient India represented separate vocational or professional training and was not an integral part of general education. The indigenous school, which flourished until about the beginning of the 19th century, did not make any provision for the learning of craft. Thus the practice of ancient arts and crafts came to be limited to a few families of artisans and craftsmen who formed themselves into special castes based on the practice of a craft or industry. This had its rise in the development of four *Varnas* or functional groups. The phenomenon of a highly skilled craftsman being illiterate and uneducated became common. Learning and efficiency of craft was restricted to families where the skill was handed from father to son. As a result it did not become part of the general education.

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* 1. R. K. Mukerjee, "*Ancient Indian Education*", Chapter XI, pp. 345-365.

2. S. K. Dass, "*The Educational System of the Ancient Hindus*", Chapter VIII.

3. A. S. Altekar, "*Education in Ancient India.*" Chapter VIII, especially pp. 200-206.

II. Beginning of Modern Education in the 19th Century

From 1823 onwards the British Government began to lay the foundation of the modern system of education in India and this gradually displaced the indigenous schools. In the beginning, the modern system of education did not differentiate stages like primary, secondary and univerity. Instead, all schools were divided into two groups—vernacular and English—on the basis of the medium of instruction they used. The objective of both types of schools was the same—the spread of Western science and literature. In the curricula of these schools there was no place for craft work.

Wood's Education Despatch, which marks an important landmark in the annals of the history of education in India, recommended establishment of the different types of institutions. It also set out clearly their aims and scope. The scope of primary education was defined as consisting of whatever knowledge including reading, writing and simple arithmetic and rules of land measurement, which enables each man to look after his own rights. Developments in primary education that took place in consequence of recommendations in the Despatch, were surveyed in the report of the Indian Education Commission of 1882. According to this Report there was uniformity among the various Provinces in the teaching of the three R's. In Bombay, however, the curriculum for the upper primary schools included inter alia the following optional subjects :

(i) Elementary drawing
(ii) Field instruction in agriculture
(iii) Printing, carpentry, joinery, smithy, etc.

It has not been mentioned in the report of the Commission as to how far the optional subjects (ii) and (iii) above were popular and what arrangements existed for their teaching.

The Wood's Despatch also recommended establishment of secondary schools, the purpose of which was to convey to the great mass of the people useful and practical knowledge suited to every station in life. It is clear that the Despatch contemplated provision of vocational or pre-vocational instruction at the secondary stage. But unfortunately nothing was done about this recommendation.

Reviewing the standards in secondary schools in 1882, the report of the Indian Education Commission states, "on a compendious review of the course of study in the secondary schools or departments through out British India, it may be generally stated that from the time of his entrance upon the secondary stage, a scholar receives instruction in the following subjects : English, the vernacular, arithmetic, geography and history." The accounts of the courses of study for the middle schools and the matriculation examinations of the different Universities given in the Report make no mention of craft work or practical bias in the curricula of these schools.

III. Early Experiments in Manual Training

That the Indian Education Commission was not impressed by the need for introduction of craft work in the primary schools is conspicuous by the absence of any reference to this subject in their recommendations on primary education.

As regards secondary education, the Cammission had made one very valuable recommendation that "in the upper classes of the high schools there be two divisions, one leading to entrance examination of the Universities, the other of a more practical character, intended to fit youths for commercial or non-literary pursuits." The Commission did not elaborate the character of the other division of a more practical character and it was left to the departments in the provinces to decide it.

Notwithstanding the absence of any recommendation for introduction of craft in the primary and the middle schools in the report of the Indian Education Commission, the need for manual work of some kind in these schools was soon realised. Manual training based upon the Sloyd system was included as a compulsory subject in the curriculum of the upper primary examination, instituted in the Central Provinces in the year 1890-1891. The object of the system was, by a series of simple exercises in wood work, clay modelling, card-board modelling and paper work, to train the faculties to accuracy, dexterity and a sense of proportion, to divert the mind from words to things, to dignify labour and thereby, possibly, to destroy that contempt for manual work which is so common among Indian middle and upper classes and which paralyses all efforts to give education a more practical bent. The system of manual training was unpopular, however, mainly because its object was misunderstood. Enforcing the requirements threatened to reduce the attendance in primary and middle schools with the result that manual training was transferred to the list of optional subjects shortly after the end of 1891.

An attempt was also made in the Madras Province to introduce manual training in the school curriculum. An extract on this subject appears in "Progress of Education in India, 1892-93 to 1896-97—Third Quinquennial Review", and is reproduced below :

> "Every opportunity is taken to impress upon heads of institutions the paramount importance of manual training. But it is difficult to get managers of schools and parents of puppils to realise the purpose which it is intended and fitted to serve in the school curriculum. They look upon the time devoted to this subject as so much deducted from the time which belongs to ordinary book subjects and therefore as a hindrance to a boy's chance of passing one or the other of the public examinations, success in whch is regarded as of more importance than the education which leads up to them. But instead of proving an impediment to ordinary school work, the experience of other lands have shown that both the quantity and the quality of ordinary school work are improved ; the training of the hand, the eye, and the intelligence, and the general arousing of the mental and bodily energies having a most beneficial effect on the whole of the work of the school. Comparing the state of things at the end of quinquennium with what it was at the beginning, it may appear that instead of progress there has been retrogression, there being fewer carpentry classes attached to institutions for general education than there were five years ago. But it is surely something gained if, during those five years, we have been able to rid ourselves of some of the absurd notions at first entertained as to the aims and methods of manual training as a part of the school curriculum and as to the qualifications needed in those who undertake to impart instruction. This, I think, we have done, in part at least. It is no longer supposed that normal training can take its proper place in line with the ordinary subjects of the curriculum, and it will be years before the services of teachers specially trained

for the charge of such classes can be obtained in sufficient numbers."

Besides these attempts at introduction of manual work in the schools, efforts were also made to give a practical bias to the curriculum in the primary and secondary schools. The practical bias, however, comprised mostly of modern subjects such as geography, drawing, science and sanitation and did not include subjects involving physical activity and productive work. The nature of the practical bias, was distinct from that of craft work today. For example the practical subjects for the fourth standard in primary schools in Madras included object lessons or elementary science, free hand drawing, needle work (for girls in native schools), geography, history of India, agriculture (for boys only), mensuration (for boys only) and hygiene and elementary sanitary science. As regards Bengal, the third Quinquennial Review on Progress of Education in India, 1892-93 to 1896-97 reports :

"The course for primary schools is also of a practical character. Agriculture as well as physics is prescribed for the upper examination ; and instruction in sanitation is compulsory in all primary schools, both of the upper and lower grades. Besides these, mensuration according to Indian method is taught, as well as Indian methods of calculation and keeping accounts, and in the language textbook or Reader, some information about agriculture and the nature of maps is sought to be conveyed."

Similar attempts, made in other provinces, were also reported in the Quinquinnial Reviews.

By 1901-1902 alternative examinations at the secondary stage had been instituted by the Governments of Madras and Bengal and also by the Universities of Allahabad, Bombay and Punjab. The alternative examination in Madras included a comprehensive list of optional subjects such as mensuration, hydraulics and hydraulic engineering, building materials and construction, surveying and levelling, mechanical drawing, bridge-making, agriculture, modelling, botany, general biology, drawing, hygiene, inorganic chemistry, wood and copper-plate engraving and etching, banking and political economy etc.

For the school Final examination of the Allahabad University, the candidates had to study English, Geography, History, Mathematics and a Modern Indian language as compulsory subjects and any two of the following subjects :

1. Drawing ;
2. Elementary Physics and Chemistry
3. Agriculture and surveying
4. Book keeping
5. Political economy

In 1901-1902, about 2000 candidates appeared for the alternative examination (out of which 1200 belonged to Bombay where many candidates took both the examinations) as against 23000 candidates who appeared for the matriculation examination. It is, therefore, evident that the alternative courses had not become popular.

IV. Attempts at Improvement of curricula in Primary and Secondary Schools

With the initiative from Lord Curzon, at the beginning of the 20th century, emphasis came to be laid on the qualitative improvement of education. Among the various reforms suggested by him, was the provision of vocational courses at the secondary stage and the holding of an alternative examination to the Matriculation. The Government of India Resolution on Educational Policy (1904) stated :

> "The first call for fresh effort is now towards the development of Indian industries, and specially of those in which native capital may be invested. Technical instruction directed to this subject must rest upon the basis of preliminary general education of a simple and practical kind, which should be clearly distinguished from the special teaching that is to be based upon it, and should, as a rule, be imparted in schools of ordinary type."

As regards the primary schools, Lord Curzon emphasised curriculum enrichment and urged that agriculture be included as a subject, particularly in rural schools.

According to 'Progress of Education in India, 1902-1907, Fifth Quinqennial Review', the status of teaching of manual work for older boys in the primary schools in the various provinces was as follows :

Madras—Recommended as an adjunct to all subjects.

Bombay—Optional, as alternative to object lessons in science.

Bengal & East Benagal—Optional.

United Provinces—Not taught
Punjab—Not taught
Assam—Not taught
C. P. and Berar—(Urban—Optional)
(Rural—Not taught)

In the middle vernacular schools, according to this review manual training was compulsory in the United Provinces and was optional in Bengal and Central Provinces. It was also an optional subject for the school final examination in the Province of Bombay. No data evaluating the quality of work and the arrangements made for the teaching of manual work in the schools is available.

The Quinquennial Reviews on Progress of Education in India, for the period 1907-1922[1] do not give information about the status of manual work which may be adequate for any conclusion. Absence of emphasis on this subject in these reports should not, however, lead to the inference that it was not regarded as of much importance.

Inspite of Lord Curzon's emphasis on improvement of school curricula, not much was achieved in the years following him. No measures were taken for giving a practical bias to the secondary school curriculum with the purpose of introducing vocational or pre-vocational courses at this stage. The administration apparently believed that the alternative examination would meet all the needs of the situation. Analysing the causes of this situation as it existed in 1921, Syed Nurullah and J. P. Naik have stated as follows,[2]

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[1] *Progress of Education in India,* 1907-1912 Sixth Quinquennial Review, Vol. I p. 173.

[2] Syed Nurullah and *J.* P. Naik. *A History of Education in India* (*During the British Period*), 1951, Macmillan & Co. Ltd.

"......it must be admitted that there was no keen demand from the public for the introduction of vocational courses and that the attempts made at introducing them often became unpopular. This was due to several causes among which the following may be mentioned :—

"(1) Until very late in this period, the problem of educated unemployed had not become serious. It was still possible for a person with a knowledge of English to get some employment either under Government or in private schools or trade. In other words, a knowledge of English led to employment and was, therefore, still equivalent to vocational training, and so long as this situation did not alter, real vocational training did not have much chance of becoming popular."

(2) "The pupils of the upper secondary standards came mostly from the middle classes (from the economic stand-point) who were accustomed for centuries to live by intellectual work rather than by manual labour. It was not surprising that these pupils did not take kindly to manual work and vocational training.

(3) "Lastly, the lack of provision of hand-work, etc., at the primary and lower secondary stage proved to be another obstacle to the introduction of vocational courses at the upper secondary stage. Children who were brought up in an entirely bookish curriculum could not naturally be expected to take very kindly to manual work in the tenth year of study. What was really needed was a good deal of doing element in the school course right from its very beginning."

So far we have been discussing mostly the attempts made to introduce manual work or prevocational courses in the schools for general education. There had, however, come into existence a number of institutions called craft schools or trade schools designed to train students in specific vocations in order to meet the needs of the various industries. According to 'Education in India 1902-1907 Fifth Quinquennial Review, the position of these schools as it obtained at that time was as follows :

> "These schools are not widely spread in India, nor is there at present much indication of a demand for them among the artisan population. The Indian craftsman ordinarily learns his trade not at a school but by apprenticeship at the craft itself, and those who establish schools which are intended as a substitution for apprenticeship must depend upon being able to prove to the artisan that they can give a better training in that particular craft than is to be obtained in the workshop. Upon examination of the existing schools of this kind, some are found to be aiming not so much at the improvement of an industry as at providing a course of training for boys and girls who would not otherwise be able to learn a trade in the ordinary way by apprenticeship. To this class belong the industrial orphanages, which fulfil a charitable and laudable purpose in teaching a trade to children who have no other means of being placed out in the world."

The question of craft and industrial schools, therefore, rightly invited the attention of Lord Curzon's Government. It was

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observed that the "Industrial schools in India were lacking in definiteness both of method and object, that there had been no clear differentiation between general and technical studies, that they were not organised upon any sustained policy, that they were insufficiently coordinated with local industries and trades and that the impression they had produced upon industrial education and development had been relatively small. Lord Curzon's government took active steps to remedy this state of affairs. In the first place, they constituted a committee immediately after the Simla Conference of 1901, which held conferences with local authorities in the provinces. The main recommendation of that committee was the organisation of an apprentice system under which the master artisans would ply their trades on the school premises. This was not accepted by the Government of India, who, in a resolution dated the 4th of January, 1904, proposed whole time schools at industrial centres for those who had reached a certain standard of general education, and for the encouragement of local handicrafts, half-time industrial primary schools the course in which should be designed with special reference to teaching accuracy of workmanship and familiarising the pupils with the best designs and processes applicable to their hereditary calling."*

Subsequent Quinquennial Reviews report gradual increase in the number of schools of these types. The variation in the standards of training, resulted in overlapping, on the one hand, with schools of general education, and on the other, with technical schools. Frequently individual institutions offered courses in widely different subjects of varying standards and degrees of value. Variations in terminology used for these schools in the different provinces, make it difficult to give an account of their progress.

The rising tide of nationalism, intensification of the freedom movement and the spread of Swadeshi movement in the early twenties, led many national leaders to criticize the existing system of education and to demand radical changes in it. One of the changes demanded was an increased emphasis on the practical and vocational aspect of education. As Lala Lajpat Rai wrote '......the first aim of all publically imparted education in India should be to increase the productive capacity of its citizens." On 15th June, 1921, Gandhiji also wrote as follows in Young India :

> "There is something radically wrong, specially for a nation so poor as ours, when parents have to support so many grown up children, and give them a highly expensive education without the children making any immedate return. I can see nothing wrong in the children, from the very threshhold of their education, from paying for it in work. The simplest handicraft suitable for all, required for the whole of India, is undoubtedly spinning alongwith the previous pocesses. If we introduced this in our educational institutions, we should fulfil these purposes, make education self-supporting, train the bodies of the children as well as their minds, and pave the way for a complete boycott of foreign yarn and cloth."•

Spinning was introduced in the national schools that came to be established in 1921-22 as a result of the non-cooperative movement. According to 'Progress of Education in India, 1917-22, Eighth Quinquennial Review', there were in 1921-22 1349 national institutions with

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*_Progress of Education in India,_ 1907-1912, Sixth Quinquennial Review, Vol. I,

S.C.E.R.T West Bengal
Date........................

S.C.E.R.T. West Bengal
Library

96682 scholars. The movement of establishing national institutions did not last for long.

In the twenties the question of giving vocational bias to education again engaged the attention of the governments and attempts were revived to do something in this direction.

In Bengal the conference of Education Officers held in 1925 recommended that "While vocational training might more properly be given in special institutions after the school course, some subjects which trained the hand and the eye and give scope for the creative joy of the artist should be introduced in the schools."

It has been reported in the 'Education in India, 1922-27—Quinquennial Review' that "In the United Provinces the whole position regarding vocational instruction in schools for general education was reviewed by a committee and it was decided that the demand for vocational instruction could best be made by the institution of special schools. The Committee, however, recommended the development of manual instruction in secondary schools on account of its general educative value. In 1925, wood work was introduced as a compulsory manual training subject in middle vernacular schools and by the end of the quinquennium, classes had been started and special manual training blocks constructed to provide the accommodation in 15 District Board Schools. It has also been reported in this Quinquennial Review that in Assam regular manual training classes have been provided in only 3 Government high schools, but hand-work of some kind is taught in the lower classes of all the secondary schools in the Province."

In this Review the D. P. I. Madras is also reported to have stated, "It must certainly be claimed that the experiment of introducing practical work into secondary schools has, on the whole, been successful. The general education of the pupils has not suffered but has rather been assisted by developing to the full all the faculties of the pupils. The aim of practical instruction as being educational and not vocational has been steadily kept in view and the various forms of handicraft have helped to develop accurate observation and the power of concentration in pupils, to create aesthetic taste and to arouse an interest in manual work in arts & crafts among the rising generation during the most receptive period." In Madras in 1927, 68 schools or centres with an attendance of nearly 12,000 pupils were providing instruction in some kind of manual work including wood work, carpentry, metal work, agriculture, tailoring, engraving, rattan work, spinning, book binding, dyeing, seri-culture, market gardening, horticulture, mica work, smithy, coir work and printing."

It has been stated in 'Education in India 1922-27—Ninth Quinquennial Review' that "the most note-worthy features in the alterations in the curricula during the quinquinnium have been the extended adoption of vocational and manual instruction in secondary schools".

The question of introducing manual work and prevocational courses also came up before the Hartog Committee in 1929. This Committee observed :

"It is true that in almost all provinces attempts have been made in recent years to introduce practical pre-vocational instruction in the ordinary schools, but it is evident that there has been as yet no clear appreciation of the aim of such instruction, and its proper relationship to the ordinary school course. In some provinces it is regarded merely as a form of manual instruction which is helpful as part of general education of pupils ; it is to be welcomed as such. In other provinces, although the instruction is definitely intended to be prevocational, it is imparted in the higher classes of secondary schools to pupils who, in the majority of cases are striving to qualify for admission into the colleges and have no intention whatever of making use of the instruction as a preliminary to technical training. Only in a few cases is this instruction imparted in such a manner and at such a stage of school course that pupils are definitely encouraged, after receiving a suitable measure of general education, to leave school in order to take up some practical occupation or to receive technical instruction in a special institution. The uncertainty of aim and thought has been accentuated by the fact that in most provinces, the industrial schools are controlled by a separate Department of Industries and, in some cases, by a minister other than the Minister of Education, and therefore that they tend to be regarded almost as rival to the ordinary schools."

Among other things, the Committee had recommended :

(i) The retention in the middle vernacular schools of more of the boys intended for rural pursuits, accompanied by the introduction of a more diversified curriculum in those schools;

(ii) The diversion of more boys to industrial and commercial careers at the end of the middle stage, for which provision should be made by alternative courses in that stage, preparatory to special instruction in technical and industrial schools.

The Central Advisory Board of Education in their first meeting held in 1835 considered this question and recommended that at the lower secondary stage some form of manual training should be provided "which would aim at the development of practical aptitudes and be made compulsory.

'The progress of Education, 1932-37, Eleventh Quinquennial Review' contains reports of the progress achieved till then in this direction in the various provinces. These reports show that very little was achieved in the schools. The course in manual training included carpentry, smithy, spinning and weaving, book-binding and card-board work, horticulture, gardening and agriculture etc.

It will be seen that the period from 1882 to 1937 witnessed a number of experiments in introduction of manual work in the schools in the various provinces. However, these attempts were sporadic and no prorgamme of manual work as an integral part of general education was adopted for the country as a whole.

V. Basic Education and Renewed Emphasis on Vocational Education

The year 1937 was a year of significance in the history of education in India. In this year Mahatma Gandhi started writing very emphatically about education. He suggested that for education to be sound in principles, it must be imparted through some craft or productive work which should provide the nucleus for all other school instruction. In October 1937, the National Education Conference which met at Wardha under the Chairmanship of Gandhiji inter-alia recommended that "the process of education should centre round some form of manual and productive work and that all the other abilities to be developed or training to be given should as far as possible be integrally related to the central handicraft, chosen with due regard to the environment of the child, "and that" this system of education will be gradually able to cover the remuneration of the teachers." The Conference then appointed a committee under the chairmanship of Dr. Zakir Husain which submitted their report in 1938 containing a scheme of Basic education.

Also in June 1937, A. Abbott and S.H. Wood submitted their report on Vocational Education in India. This Report recommended inclusion of manual work in the curricula of the primary, middle and secondary schools. In the words of this report, "Manual activities should find a place in the curriculum not because the pupils or some of them will earn a living by manual labour but because satisfaction of the desire to make or create is necessary to balanced development. It is indeed often the key to a boy's serenity."

The scheme of Basic education (also called the Wardha Scheme) recommended by the Zakir Husain Committee envisaged that the learning of the child should be correlated with a productive activity (be craft work), as well as with the physical and social environments of the child. The reasons for the introduction of craft work in the curriculum of the schools as stated in the report of the Committee are as follows :

a. Modern educational thought is practically unanimous in commending the idea of educating children through some suitable form of productive work. This method is considered to be the most effective approach to the problem of providing an integral all-sided education ;

b. Psychologically it is desirable because it relieves the child from the tyranny of a purely academic and theoretical instruction against which its active nature is always making a healthy protest. It balances the intellectual and practical elements of experience and may be made an instrument of educating the body and the mind in coordination.

(c) Socially considered the introduction of such practical productive work in education to be participated in by all the children of the nation will tend to break down the existing barriers of prejudice between manual and intellectual workers, harmful alike for both.

d. Economically considered, carried out intelligently and efficiently, the scheme will increase the productive capacity of our workers and will also enable them to utilise their leisure advantageously.

e. From the strictly educational point of view greater concreteness and reality can be given to the knowledge acquired by children by making some significant craft the basis of education.

As regards the attainment to be achieved in craft it was recommended by the committee that "such reasonable skill should be attained in handicrafts chosen as would enable the pupils to pursue it as an occupation after finishing his full course." The committee further recommended that the basic crafts in various schools may be chosen from among the following crafts :

a. Spinning and weaving
b. Carpentry
c. Agriculture
d. Fruit and vegetable gardening
e. Leather work
f. Any other craft for which local and geographical conditions are favourable and which satisfies the conditions mentioned is the report.

The Committee also recommended reorganisation of the training of teachers. One of the recommendations in this respect suggested giving training in craft-work to the teachers.

In 1938 the Central Advisory Board of Education appointed two committees under the chairmanship of Shri B.G. Kher to examine the scheme of educational reconstruction incorporated in the Wardha Scheme in the light of the Wood-Abbott Report on General Vocational Education. The Kher Committee expressed the opinion that the Wardha Scheme was in full agreement with the recommendations made in the Wood—Abbott Report so far as the principle of learning by doing was concerned. This activity should be of many kinds in the lower classes and later should lead to a basic craft, the produce from which should be saleable and the proceeds applied to the upkeep of the school.

Work on Basic education was started in 1938 and 1939 in Bihar, Bombay, Central Provinces, Madras, Orissa, U.P. and Delhi. But with the outbreak of the Second World War in 1939, this programme received a great setback and much progress could not be made.

In 1944 the Report of the Central Advisory Board of Education on Post-War Educational Development in India was published. The Board recommended adoption of Basic education as the pattern of education at the primary and middle stages. The Board however was unable to endorse the view that education at any stage and particularly in the lowest stages could or should be expected to pay for itself, by the sale of articles produced by the pupils. The most, which according to them could be expected in this regard, was, that sales should cover the cost of the additional materials and equipment required for practical work.

As regards the high school stage the Report recommended establishment of two types of high schools, viz., academic high school and technical high school. In the curriculum for academic high schools agriculture was suggested as one of the subjects and in that for technical high schools, technological subjects such as wood and metal work, elementary engineering, measured drawing etc., and also agriculture were suggested.

VI. Independence and the Plans for Educational Reconstruction

A new era started with India's attainment of independence in 1947. Basic education has been accepted as the pattern of education at the elementary stage and schools are being gradually converted to this pattern. At the secondary stage, also efforts to introduce craft work have been intensified. These developments at the elementary and the secondary stages are dealt with separately below :

Elementary Stage

Programmes were started in the States to convert the primary and middle schools to the Basic pattern and also to establish new Basic schools. As a first step towards the introduction of Basic education on a large scale some State Governments like Bombay, decided to introduce the teaching of crafts in as many primary schools as possible. Several reasons, some of which are described below, helped in the establishment of such craft schools in Bombay.

(i) It was possible to train teachers for craft schools in short-term courses so that the trained personnel could be supplied to craft schools at a mere rapid pace than to Basic schools proper.

(ii) It was also felt that a primary school in which a craft was taught as a subject would be a half-way house between an ordinary primary school on the one hand and a full-fledged Basic school on the other. In the former State of Bombay, ordinary primary schools which taught all the standards from I to VII, were converted into craft schools as an experimental measure. Thus, in 1947-48, there were 524 such schools which was raised to 1315 in 1948-49 and to 2198 in 1949-50 and to 2816 by 1954-55. The crafts approved for this purpose included (i) Kitchen gardening leading to agriculture in the higher classes ; (ii) spinning (cotton or wool leading to weaving in higher classes, and (iii) paper work and card-board modelling leading to wood work in higher classes. However, the experience of the craft schools was not found to be very satisfactory and their efficiency had fallen much short of the expectations originally entertained. It was therefore decided to convert all the existing craft schools into full-fledged Basic schools as soon as fully trained staff became available.

At the request of the State Governments the Ministry of Education published in 1950 a detailed syllabus for junior and senior Basic schools. In this syllabus selection of the following crafts for the Basic schools was suggested :

(i) Spinning and weaving ;
(ii) Gardening leading to agriculture ;
(iii) Book craft including paper and card-board work leading to wood and metal work ;
(iv) Leather work ;
(v) Clay work and pottery ;
(vi) Fisheries ;
(vii) Home craft.

In this syllabus the time to be devoted to craft work in each grade has been suggested as follows :

Grades 1-3 — Two hours a day
Grades 4-5 — 2½ hours a day
Grades 6-8 — 3 hours a day

With the launching of the First Five-Year Plan in 1951 the programme of education began to be implemented effectively in all parts of the country. During this Plan a number of schemes were put into effect by the State Governments either entirely out of their own resources or with the assistance from the Government of India. These schemes envisaged among other things : (i) establishment of Basic training institutions and conversion of non-Basic training institutions to the Basic pattern ; (ii) establishment of Basic schools and conversion of traditional type of schools to the Basic pattern ; (iii) training of craft teachers ; (iv) introduction of crafts in traditional type schools.

Towards the end of the First Five-Year Plan the Government of India appointed an Assessment Committee on Basic education. This Committee made a detailed examination of the progress of Basic education in the country and made a number of recommendations. The Committee was of the view that the progress of Basic education, on the whole, had not been satisfactory. They reported that there was no agreement among the various State governments regarding the place of productive work in Basic schools. In some Basic training schools and Basic schools, they reported, the craft work was truncated and mutilated. At places the schools were not adequately provided with craft material and raw material. The Committee also called for improvement in craft training of teachers and recommended that, "whatever crafts are selected for Basic teachers' training should be such as the teacher can later introduce them into the Basic schools as medium of learning." They also suggested that skilled traditional craftsmen should be associated with the teaching of craft work in Basic schools and Basic training schools.

On the recommendation of this Committee the Government of India issued a statement of the concept of Basic education in which the position of craft work in Basic schools was clarified. In the words of this statement :

> "Basic education, as conceived and explained by Mahatma Gandhi, is essentially an education for life and, what is more, an education through life. It aims at creating eventually a social order free from exploitation and violence. That is why productive, creative and socially useful work in which all boys and girls may participate, irrespective of any distinction of caste or creed or class, is placed at the very centre of Basic education.
>
> "The effective teaching of a Basic craft, thus, becomes an essential part of education at this stage, as productive work, done under proper conditions, not only makes the acquisition of much related knowledge more concrete and realistic but also adds a powerful contribution to the development of personality and character and instils respect and love for all socially useful work. It is also to be clearly understood that the sale of products of craft work may be expected to contribute towards part of the expenditure on running the school or that the products will be used by the school children for getting a mid-day meal or a school uniform or help to provide some of the school furniture and equipment."
>
> "As there has been controversy and difference of opinion regarding the position of craft work in Basic schools, it is necessary to state clearly that the fundamental objective of Basic education is nothing less than the development of the child's total personality

which will include productive efficiency as well. In order to ensure that the teaching of the Basic craft is efficient and its educative possibilities are fully realised, we must insist that the articles made should be of good quality, as good as children at that stage of their development can make them, socially useful and, if necessary, saleable. The acquisition of skills and the love for good craftsmanship have deeper educative significance than merely playing with the tools and raw materials which is usually encouraged in all good activity schools. This productive aspect should in no case be relegated to the background as has been usually the case so far, because directly as well as indirectly, efficiency in the craft practised undoubtedly contributes to the all-round development of the child ; but on the other hand, never should the productive aspect be allowed to take precedence over the educational aspect. It sets up before children high standards of achievement and gives them the right kind of training in useful habits and attitudes like purposeful application, concentration, persistence and thoughtful planning. While it may not be possible to lay down specific targets for productivity at this stage, it should be the teachers' endeavour to explore its economic possibilities fully with the emphatic stipulation that this does not in any way conflict with the educational aims and objective already defined. However, it has to be stated that, in the upper classes of junior Basic schools and in the senior Basic schools, it should not be difficult for States to lay down certain minimum targets of production in the light of carefully assessed experiences.

"In the choice of basic crafts which are to be integrated into school work, we should adopt a liberal approach and make use of such crafts as have significance from the point of view of intellectual content, provide scope for progressive development of knowledge and practical efficiency. The basic craft must be such as will fit into the natural and social environment of the school and hold within it the maximum of educational possibilities. The idea that has been wrongly created in the minds of some people that the mere introduction of a craft in a school, e.g., spinning can make it a basic school does grave injustice to the concept of Basic education."

"The emphasis on productive work and crafts in basic schools should not be taken to mean that the study of books can be ignored. The basic scheme does postulate that the book is not the only or the main avenue to knowledge and culture and that, at this age, properly organised productive work can in many ways contribute more richly both to the acquisition of knowledge and the development of personality. But the value of the book, both as a source of additional systematised knowledge and of pleasure cannot be denied and a good library is as essential in basic school as in any other type of good school."

This concept of Basic education has been accepted by all the State Governments.

During the Second Five Year Plan further schemes, similar to those implemented in the First Five Year Plan, were taken up. A scheme of orientation of primary schools towards the basic pattern was also taken up. For the integration of theoretical learning with its practical application a Five Point Programme was proposed by the All India Basic

Education Assessment Committee. This programme envisaged the adoption of the same syllabus in basic and non-basic primary schools and also the introduction of crafts in non-basic schools with the ultimate object of converting them to the basic pattern.

In 1958 the Communist Government of Kerala introduced a new scheme of Basic education entitled, "Towards Basic Education". The accent in this scheme was on the use of tools leading to vocational bias. As a move in this direction of making education work-centred, it was proposed to adopt tools and crafts as instruments to convey knowledge to children from early stage. For this purpose it was proposed to have a tool-room in every school. The idea was to give technical orientation to the students even at the primary stage. It was expected that while the children handled the tools, appliances, etc., the teacher would explain to them what they are and also their uses. Practice of craft was to preccde by a familiarity with tools and their uses, and it was expected that the proper explanation of the mechanical advantage arising out of the use of each single instrument would gradually create in the children a technical sense which would give them proper background to take up vocational courses later on. The progress of this scheme is, however, not known, but it may certainly be considered as a new development in the attempts to introduce crafts in the school system and subsequently developing it as a scheme of polytechnisation.

The National Institute of Basic Education, established by the Government of India in 1956, has been devoting part of its attention to the problem of teaching crafts in the schools. Among its various activities in this connection the Institute conducted one study of the educational potentiality of the crafts[1] which involved a determination of the suitability of the various crafts according to specified criteria. The second study of the Institute suggested targets in spinning, weaving and wood work[2]. The Institute has also been exploring the suitability of crafts other than the traditional crafts such as spinning, weaving, wood work and agriculture. Another series of craft studies of the Institute make detailed suggestions regarding the teaching of fibre craft, bamboo craft, doll crafts and craft work from waste materials.[3]

Secondary Education

The Secondary Education Commission, which submitted its report in 1953, recommended that craft be made a compulsory subject in the middle schools. At the secondary stage the Commission recommended a diversification of courses which envisage a core-curriculum for all students and seven groups of optional subjects. The core-curriculum recommended by the Commission included one craft to be chosen from the following list (which might be added to according to needs).

a. Spinning and weaving,
b. Wood work,

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[1] *Measuring Educational Potentiality of Crafts (Research and Studies)*. New Delhi, National Institute of Basic Education, 1960. 28p.

[2] Jayaraman, M. *Targets for Craft Work*. New Delhi, National Institute o Basic Education, 1960. 71p. (Memeographed).

[3] (a) *Fibre Craft (Crafts for Basic Schools.)* New Delhi, National Institute of Basic Education, 1958. 61p.
(b) *Elementary Bamboo Work (Crafts for Basic Schools,)* New Delhi, National Institute of Basic Education, 1961. 57+55p. (Memeographed).
(c) *Elementary Doll Making (Crafts for Basic Schools)*. New Delhi, National Institute of Basic Education, 1961. 31+29p. (Memeographed).
(d) *Utilising Waste Material*. New Delhi, National Institute of Basic Education, (In press),

c. Metal work,
d. Gardening,
e. Tailoring,
f. Typography,
g. Workshop practice,
h. Sewing, needle work and embroidery,
i. Modelling.

The optional subjects recommended by the Commission included agriculture.

In the 'Draft Syllabus for Secondary Schools' the All India Council for Secondary Education recommended the following crafts for the secondary schools :

a. Hand spinning and Weaving,
b. Wood work,
c. Metal work,
d. Gardening,
e. Tailoring,
f. Sewing, needle and embroidery work,
g. Leather work,
h. Clay modelling and Paper mache,
i. Workshop practice,
j. Printing technology.

In this chapter, it has been made clear that during the period from 1947 onwards efforts on an all India basis have been made to make craft work an integral and important part of education at the elementary and the secondary stages. The educative value of the craft work and its role in child development have been universally acknowledged among the educationists and the State Governments. Concrete plans for the achievement of this reform have been under implementation under the five year plans. We are still far away from the target of introducing craft work in all the schools in the country in a systematic way because of the sheer magnitude of the problem. Such a reform will take some time.

A number of steps have been taken by the government to develop handicrafts apart from their teaching in schools. All India Boards, such as Khadi and Village Industries Board and Handloom Board etc. have aims and activities that are largely of economic type, although training programmes are included too. These training programmes are of a specialised type and as they train persons for certain vocations, they fall outside the scope of general education.

Inspite of the progress made so far in connection with the introduction of crafts in schools much remains to be done. The Assessment Committee on Basic education in its report in 1955 drew attention to a number of defects in the training and organisation of craft work in the teachers training institutions. There does not appear to have been much change since then. The Committee pointed out that the weakness of training was linked up with the weakness of the Basic schools. The duration of the teachers training course at the undergraduate level continues to be one year in many States. The duration of the course at the graduation level is one year in all the States. Considering the heavy curriculum that has to be followed in the teachers training institutions, not much work can be expected in the field of crafts by the trainees. Much also remains to be done in the secondary schools.

Secondly, notwithstanding the growth of opinion among the educationists and official circles in favour of the utility of craft work in the schools, there is no evidence of strong public opinion in support of this subject. It has been mentioned in the earlier paragraphs that the various attempts for introduction of manual work in the schools could not succeed on account of want of supporting public opinion. Little, however, appears to have been done to remedy this situation. A white collar job continues to be the aim of education for a large majority of students, as it was in the past. No effective programme of training of teachers for crafts has yet been developed.

Financial reasons have also tended to impede the progress of craft work in the schools. The cost of equipment and space required for introduction of craft work in all the elementary and secondary schools amounts to so much that any programme for universal introduction of craft work in a short span of time becomes prohibitive. The programme has, therefore, to be staggered over a few Five Year Plans

CHAPTER 4

THE PRESENT POSITION OF CRAFTS IN THE INDIAN SCHOOL SYSTEM

Part A : Elementary School Level

The national pattern for elementary education in India as accepted by our States and Central Government is Basic education. This means that crafts should form a compulsory subject in all elementary schools run on Basic pattern. At present we are in the process of orienting and converting our elementary schools towards the Basic pattern. Complete conversion is likely to take some years. In the meantime it may be fruitful to know how far we have gone and what is the actual status of one of the aspects of Basic education namely, craft education in the elementary schools.

Information for this section of the report is mainly derived from two sources—analysis of the syllabii prescribed in various States by the Education Departments (for the syllabii studied, see appendix I) and information received from State Departments of Education and some private non-official agencies in the States in response to a detailed questionnaire (see questionnaire in appendix IV). At this time information in response to the questionnaire has been received from only 12 States. Information about Assam, Bihar, Gujarat, Madhya Pradesh, Maharashtra; Rajasthan, Delhi, Himachal Pradesh and Uttar Pradesh has been received from the State Departments of Education. In the case of Madras, West Bengal and Andhra the information has been supplied by various organisations in these States that are concerned with education.

Duration of the elementary stage :

As is indicated in Table I below the duration of the elementary stage in the several States varies from 7 to 8 years.

TABLE 1

1	2	3	4
Andhra	Assam	Bihar	Gujarat
I—VIII	I—VIII	I—VIII	I—VII
5	6	7	8
Jammu & Kashmir	Kerala	Madhya Pradesh	Madras
I—VIII	I—VII	I—VIII	I—VII
9	10	11	12
Maharashtra	Mysore	Orissa	Punjab
I—VII	I—VII	I—VII	I—VIII
13	14	15	16
Rajasthan	Uttar Pradesh	West Bengal	Tripura
I—VIII	I—VII	I—VIII	I—VIII
17	88		
Himachal Pradesh	Delhi		
I—VIII	I—VIII		

In 7 of the 18 States, the elementary school is of 7 years duration. In most States in which the duration of the elementary stage is 8 years this period is divided into the junior primary, extending over classes I to V, and the middle stage extending over VI to VIII. In some other States, for example, Maharashtra, Gujarat and Mysore where the education of the elementary school stage is of seven years, the junior primary stage extends over classes I to IV and the middle stage covers classes V, VI and VII. The entire elementary school period covering classes I to VII is known as the primary school in these States.

Types of syllabii

Some States retain different syllabii for the basic and non basic schools. The trend seems to be towards a common syllabus with the difference that basic schools are also required to practise some organised craft work. Fewer than half of the states have now evolved integrated syllabii which are activity-oriented and which make some of the basic school activities obligatory for all schools. Of the syllabii analysed for purposes of the present study, the syllabii for the States of Bihar, Madras, Mysore, Rajasthan, Delhi and Himachal Pradesh were integrated syllabii.

Position of crafts in the elementary schools

The following table reveals for each State whether crafts are taught at different stages. If taught, whether these are compulsory or optional.

TABLE 2

State	Primary stage		Middle stage	
	Junior Basic	Non-Basic primary	Senior Basic	Non-Basic Middle
Andhra	C	C	C	C
Assam	C	—	C	—
Bihar	C	C	C	C
Gujarat	C	C	C	C
Jammu & Kashmir	NIL	NIL	NIL	NIL
Kerala	C	C	C	C
Madhya Pradesh	C	C	C	C
Madras	C	C	C	C
Maharashtra	C	O	C	O
Mysore	C	NIL	C	NIL
Orissa	C	C	C	C
Punjab	C	C	C	O
Rajsathan	C	C	C	C
Uttar Pradesh	C	C	C	C
West Bengal				
Tripura	C	—	C	—
Delhi	C	—	C	—
Himachal Pradesh	C	C	C	C

(Note : In the table, 'C' denotes that craft work is compulsory. 'O' stands for optional and 'NIL' denotes that no craft work is done. '—' denotes uncertain or vague information.

A glance at table 2 indicates that craft teaching has become more or less accepted and established in the elementary schools, whether Basic or non-Basic. In 11 out of 18 States for which information is available craft is being taught as compulsory subject in the primary classes. Only in Maharashtra craft is an optional subject in schools other than Basic schools. The Mysore syllabus states that the craft work prescribed for class I of Basic schools will be common to all the elementary schools. In schools other than full Basic schools, in lieu of craft work, arts and common activities will be carried on with greater emphasis. The West Bengal syllabus indicates that crafts are just being introduced in the primary classes of non-Basic schools. It is not indicated whether they form a compulsory or optional subject. Delhi has an integrated syllabus for basic and non-Basic schools but craft is a compulsory subject only in Basic schools.

At the middle stage, craft is compulsory in Basic schools. It is interesting to note, however, that the Jammu and Kashmir syllabus makes no mention of Basic schools and for classes I to VIII craft as a subject has not been prescribed. It is possible that the latest information about this State is not available with us. The syllabus analysed gives no date of publication.

In the middle classes of the non-Basic schools craft forms a compulsory subject in 11 States. Only four States mention that craft is not practised in the middle classes. In Maharashtra craft is taught as an optional subject in the non-Basic middle schools.

Objectives of the teaching of craft in elementary schools

The syllabii of the different states for elementary schools do not in many cases make any mention of the specific objectives for the teaching of crafts, although some syllabii include general statements on this subject. For example, the Madhya Pradesh syllabus is admittedly drawn up on the lines of the craft-centred syllabus of the Hindustani Talimi Sangh. Some other States, for example, Andhra, Assam, Gujarat, Madras, Maharashtra, Rajasthan, West Bengal and Himachal Pradesh mentioned some objectives of the teaching of crafts in the elementary schools in response to our questionnaire. These objectives as mentioned in the responses to the questionnaire or in syllabii referred to above, are summarised in table 3 below.

TABLE 3

Objectives of the teaching of craft in elementary schools

States	Basic schools		Non-Basic schools	
	Junior	Senior	Primary	Middle
Andhra	No specific objectives of craft teaching have been mentioned except that they help the students in earning a living and in preparation for future life.			

TABLE 3 (*Contd*)

	Basic schools		Non-Basic schools	
State	Junior	Senior	Primary	Middle
Assam	1. To relieve pupils from bookish education and to impart better type of education through craft leading to complete development of body, mind and spirit. 2. Handicrafts in schools also give rural atmosphere to the pupils and this breaks the barrier between the schools and the society around. 3. Some sale proceeds also are expected from the products of the schools from which mid-day meals and uniforms can be supplied to the pupils.			
Bihar	1. To create vocational bias, to stimulate initiative and to foster a sense of dignity of labour. 2. To equip the pupil with such reasonable skill as to enable him to produce useful articles to meet the basic requirements for his life as well as for his school community. 3. To offer opportunities for acquring correlated knowledge in different subjects. *Note* : While keeping the above objectives in view efforts are made to ensure that the craft work is also economically productive. Economic productivity is a good test of efficiency of the craft work and efficient craft work is important if it is to be educationally useful.			
Gujarat	To give necessary training in craft to be self-sufficient individually or collectively in the matter of fundamental needs of a human being.		—	—
Kerala	1. To develop the dexterity of fingers of the children and their powers of observation and creative imagination.	More attention is paid to tidiness and finish of the products, the main objective being the same as for the junior classes.	Same as for the Basic schools.	

TABLE 3 (*Contd.*)

State	Basic Schools		Non-Basic School	
	Junior	Senior	Primary	Middle
Madhya Pradesh	By practical methods.			
Madras	1. To give children opportunity to practise the crafts of simple nature according to their capacity and to produce simple articles of utility as well as beauty. 2. To develop productive skills. 3. To provide opportunity for creative self-expression.	1. To give all the pupils scope for self-expression. 2. To help them to carry out their ideas by means of simple arts and crafts. 3. Training in creative and manual dexterity.	Same as for Basic schools. Same as for Basic schools.	
Maharashtra	1. It is a medium of instruction. 2. It trains mind and body. 3 It develops good qualities as cooperation and sportsmanship. 4. It brings all-round development of the child.			
Rajasthan	1. Self-supporting. 2. To work accurately and scientifically.			
West Bengal	1. To help in total education. 2. To help in creative self-expression. 3. To help in productive efficiency and in manipulating skills.	1. In senior Basic schools productive aspect is stressed more than in junior Basic schools.		
Himachal Pradesh	1. The students should acquire love for manual work. 2. The child should be able to coordinate his sensory activities and apply such experience in each situation.			

It will be seen from the table that the objectives of the teaching of crafts are the same for Basic as well as non-Basic schools. No State has mentioned separate objectives for the two types of schools. The objectives in some States specially in Kerala, Madras and West Bengal vary a little in the primary and middle classes of the elementary school. The information available under this head, however, seems to be inadequate for drawing any general conclusions.

It suggests, however, that by and large the objectives of teaching craft in the elementary schools are :—

(1) To develop the finger dexterity of the children.

(2) To develop productive skills.

(3) To provide opportunity for creative self-expression.

(4) To develop such traits as co-operation, initiative and a sense of the dignity of labour.

Targets for Craft Work

Craft being a compulsory subject in the Basic schools some targets of achievement have generally been laid in the syllabii. Since craft is not an examination subject in many of the States for non basic schools concrete targets do not seem to have been laid down in all cases. The targets of achievement that are suggested vary from State to State. Some follow the targets laid down in the syllabus of the Hindustani Talimi Sangh. Different crafts tend to have targets that differ both quantitatively and qualitatively. The National Institute of Basic Education published in 1960 a study of the targets for craft work. Some of the observations made as a result of this study may be usefully quoted here.

"The salient points emerging out of the study of syllabii may be mentioned as follows :

(i) Targets are laid down in relation to time available for craft practice.

(ii) The number of working days of school could be increased in the higher grades.

(iii) The quantity targets should be based on the time, devoted to craft and speed targets.

(iv) The quality targets of spinning are in terms of count, strength and evenness. Range targets are given in (count) quality of yarn.

(v) The targets for weaving are in terms of quality and speed.

(vi) The targets for wood work are indicated only in terms of articles made.

In the analysis of current practices as reported by a questionnaire in the NIBE study the following points were made :

1. Spinning and weaving, wood-work and agriculture are common prevalent crafts.
2. Targets in craft are proposed at three levels—State, Region and School.
3. Target in craft is defined in terms of quantity, quality of production and time taken to perform certain process (speed). In

a few States target is proposed in terms of money value.

4. In spinning the achievement in quantity is less than 50% of targets of all grades and it is still less for grades I and II.

5. Speed targets in takli spinning are aimed at in all the grades and charkha spinning is introduced at III grade.

6. Quantitative targets in spinning are given in terms of count in all schools and count and strength in certain cases. The schools have range targets in this aspect instead of specific targets. The achievement in relation to targets is quite fair.

7. The contribution of time factor to the craft output is not evident in these schools.

8. The contribution of other factors such as pupil-teacher ratio, craft qualification of teaching personnel, the incentives in the forms of display in museums, exhibitions, prize award, etc., could not be studied further.

9. The model range for number of working days is 221-230.

10. The practice of daily allotment of time is such as ½—1 hour for I and II grades. 1—1½ hours for III and IV grades and 1½—2 hours for higher grades.

11. In weaving, qnantitative data is indicated as sq. yards of cloth and nature of warp is shown in quality aspect.

12. In wood work, targets and achievements are tested only in quantitative terms. However, in these cases the targets do not give all the required details and hence lack in specificity.

This 1960 study recommends the following criteria to be kept in view while formulating targets for craft work :

1. The targets should be consonant with the objectives of craft in Basic education.

2. The targets should keep in view the age level of pupils, there should be graded increase in the difficulty of the processes involved in crafts.

3. The targets should take into account the time factor available for craft practice, i.e., the number of school days and the time devoted daily for practice.

4. As the efficiency of craft practice presupposes certain facilities of organisation, the supply of the following may be considered while fixing targets :

   (i) Adequate and timely supply of raw materials.
   (ii) Adequate accommodation.
   (iii) Adequate equipment and repairing tools.
   (iv) Adequate and qualified teaching personnel.

5. Targets should not only aim at the production of articles of utility but of beauty as well.

Craft followed in elementary schools

The following table gives a list of crafts followed in the elementary schools in different States :

TABLE 4.

State	Junior Basic	Non-Basic primary	Senior Basic	Non Basic middle
Andhra	(i) spinning (ii) Gardening	Teachers are free to introduce any craft they like. Generally, paper work in boys' schools and needle work in girls' schools.	Cotton craft, Agriculture Tailoring Embroidery	Wood work Book-binding and book craft, Gardening.
Assam	1. Spinning, 2. Gardening, 3. Cane work, 4. Paper work, 5. Rag work, 6. Bamboo work, 7. Jute and 8. Cloth work. (For classes I-IV)..		One of the following vocational crafts. Agriculture, spinning and weaving, gardening, metal work, leather work, wood work, lac industry, tailoring and embroidery, printing and dying, building together with the making of building materials such as bricks and tiles. If agriculture is taken up as a craft any two allied industries, e.g., dairy farming, poultry keeping, bee keeping, sericulture, pisciculture, etc., are also to be taken.	
Bihar	Usually spinning and gardening. One of the following also, if facilities exist : Cardboard, clay modelling, toy making and pottery, rope making, basket making and simple weaving: mat making		One of the following : Spinning and weaving, gardening and elementary agriculture, wood work and bamboo work, metal work, home craft, clay modelling, toy making and pottery. One subsidiary craft is also to be taken by each student.	
Gujarat	Spinning and weaving Kitchen gardening and agriculture. Card board modelling and wood work. (One of the above).	Simple craft work in clay, card-board, gardening, spinning, bamboo paper, cane, etc.	Simple craft Gardening spinning One from the following : Spinning and weaving, kitchen, gardening and agriculture,	Leather craft. Other crafts same as in senior basic Schools.

TABLE 4 *Contd.*

	1	2	3	4
			cardboard modelling and wood work, needle work and embroidery, tailoring, bamboo, card-board modelling and book binding.	
Kerala	Any one or two of the following : Cotton craft, gardening, coir work, basketry, mat weaving, paper folding and card-board, clay modelling, needle work.		Cotton craft, gardening and agriculture, coir work, wood work, card board work and book binding, leather work, pottery, Rattan work, needle work, embroidery, tailoring.	
Madhya Pradesh	Spinning and one of the following : Gardening, clay work and toy-making, paper work and card-board work, bamboo work, cane work.		One of the following : Spinning and weaving, wood work, needle craft, embroidery, leather work, gardening.	
Madras	Two of the following : Spinning and weaving, paper work and card board modelling, gardening and clay modelling.		One of the following : Gardening, spinning and weaving, wood work, home craft, including needle craft, metal work.	
Mysore	Any two of the following : Spinning ; kitchen gardening, paper and card-board work.		One of the following : Agriculture, spinning and weaving, wood work, domestic science (for girls).	
Orissa	Gardening, spinning and hand work including needle work for girls : (no spinning in class I).		Tailoring, sewing, needle and embroidery work for girls ; toy-making, basketry and coir work ; clay work and pottery, wood work ; spinning and weaving, cane work, clay modelling and paper mache.	
Punjab	Agriculture or spinning and weaving	Simple craft work	Agriculture, wood work, spinning and weaving.	Practical arts including agriculture or domestic science (for girls) or spinning and weaving or wood work.

TABLE 4 *Contd.*

	1	2	3	4
Rajasthan	Two out of the following : Spinning and weaving, gardening, clay work, card board Bamboo work paper mache.	Paper cutting and spinning	Two of the following : Spinning and weaving, and carpentry tailoring and hosiery work.	1. Card Board. 2. Leather. 3. Carpentary. 4. Clay modelling. 5. Spinning. 6. Weaving. 7. Tailoring.
Uttar Pradesh	One of the following : Elementary agriculture and gardening and allied art ; spinning and handicrafts and allied art, clay work, sewing and allied art.		One of the following : (i) Agriculture and allied art (ii) Spinning, weaving and allied art (iii) Wood craft and allied art. (iv) Book craft and allied art (v) Metal craft and allied art.	
West Bengal and Tripura	Simple crafts work in spinning, cane and leaf work, clay modelling, card board work, needle work, elementary, weaving ; gardening, paper cutting.		Needle craft (for girls) carpentry, agriculture, metal work, spinning and weaving, card board work, book binding, basketry, clay work, (in towns carpentry, cardboard and metal work are mainly followed).	
Delhi	Spinning and weaving, clay work and pottery, gardening and agriculture, card board modelling and book craft.	In oriented schools. Same as Junior Basic.	Spinning and weaving, wood work, clay work and pottery, gardening, and agriculture, cardboard modelling, and book craft,	
Himachal Pradesh	Wool spinning, wool weaving spinning and weaving of cotton, agriculture, Gardening, Ink making, Chalk making, Abri making	Same as Junior Basic.	Agriculture, home science (for girls) spinning and weaving, wood work, dairy farming ; poultry keeping ; seri-culture ; bee-keeping ; tailoring, preservation of vegetables and fruits.	

It will be seen from the above table that the syllabii generally recommended same crafts for the Basic and non Basic schools. As regards the primary and middle stages a few different crafts are recommended and when the same crafts are followed, higher standards of achievement are set.

The general pattern seems to be that a child is required to take up either one or at the most two crafts. In Madhya Pradesh, Madras, Mysore, Bihar and Kerala, primary school children are required to take up two crafts whereas in the middle classes they are expected to practise only one. Rajasthan is the only State in which the senior class child is expected to practise two crafts. The crafts commonly suggested in the syallabii for the elementary stage are : (1) agriculture or gardening ; (2) spinning or gardening ; (3) clay modelling, toy making and pottery ; (4) paper and card board work, book craft ; (5) home craft including, sewing, tailoring and embroidery ; (6) wood work. The less frequently practised crafts are leather and metal work. There are a few crafts peculiar to some of the States ; bamboo work, for example, in Madhya Pradesh, coir work, basketry and Rattan work in Kerala and lac industry in Assam. Ink making, chalk making and Abri making in Himachal Pradesh, and hosiery work in Rajasthan.

In addition to the main and subsidiary crafts listed in table 4, the present day integrated syllabii recommend in the name of hand work, other activities such as, art, drawing, music, needle work and simple craft work for non-Basic schools.

Time devoted to craft work

The time allotted to craft work in different classes of the primary and middle stages in the several States has been summarised in Table 5 given below :

TABLE 5

Time devoted to craft work per week

State	Primary stage		Middle stage	
	Junior Basic	Non-Basic primary	Senior Basic	Non-Basic Middle
Andhra	9 hours in classes 1-3	Not known	15 hours	3 periods
Assam	9 hours per week		9 hours per week	
Bihar	6 hours	6 hours	6 hours	6 hours
Gujarat	10 periods (each of 35 minutes)	About 5 periods	10 periods	4-5 periods
Kerala	5 periods		5 periods	
Madhya Pradesh	1 hour	1 hour	Not known	2 hours

State	Primary stage		Middle stage	
	Junior Basic	Non-Basic primary	Senior Basic	Non-Basic middle
Madras	5 periods		4 periods (for art and crafts)	
Maharashtra	10 periods (each of 40 minutes)	6 periods	10 periods	6 periods
Mysore	6½ hrs. in standards I and II. 8 hrs. in standards III and IV.		9 periods in standard V 8 periods in standards VI and VII	
Orissa	2 periods in class I 6 periods in classes 2, 3, 4, and 5		About 100 hours in the year	
Punjab	6 hours in classes 1-2 9 hours in classes 3 and 4.		Not known	4 periods
Rajasthan	9 periods of 40 minutes each	6 periods of 40 minutes each.	6 hours out of 36 hours	6 periods of 40 minutes each
Uttar Pradesh	All schools are reported to be Basic schools 12 periods		12 periods	
West Bengal and Tripura	4½ hours	2 hours	8 hours	
Delhi	6 hours in classes 1-2 4½ hrs. in classes 3-4 5½ hrs. in class 5.		Not known	
Himachal Pradesh	6 hours in classes 1, 2 and 3 (Not known in respect of other classes)			
	2 hours	2 hours	2 hours	2 hours

It will be seen that the same amount of time is not generally devoted to craft work in the primary classes as in the middle classes.

In some States, for example Assam, Bihar, Kerala, Madras, Orissa, U.P. and Himachal Pradesh, there is no difference in the time devoted to craft in Basic and non-Basic schools at the primary as well as the middle stages. On the whole in the States adopting a common syllabus for Basic and non-Basic schools, less time is devoted to craft work. In the States which retain different syllabii for Basic and non-Basic schools, more time is devoted to craft work in Basic schools. Some States have indicated the time devoted to crafts in terms of hours, whereas others have given numbers of periods of craft work. It is, therefore, not possible to infer exactly how much time is devoted in terms of hours and this makes exact comparisons very difficult. The time devoted to craft work per week seems to range from 2 to 12 hours in primary classes and from 2 to 15 hours in middle classes.

Mode of Evaluating craft work

The syllabii in general do not give much information about how many marks are allotted to craft work in the final promotion of the children or about the way in which the craft examinations are to be conducted. Some information is available in two of the syllabii. In Orissa, 20 marks out of a total of 300 are allotted for craft work in the lower primary examinations. There is no written examination in craft in classes 1-3. In classes 6-7, 50 marks out of a total of 750 marks are allotted for craft. The syllabus reveals that 7% of the total examination marks are devoted to written examination in crafts, in the lower primary classes. It is not clear, however, whether any practical examination is conducted and, if so, how many marks are allotted to it. In classes 6-7 out of a total of 50 marks 20 marks are assigned for the whole year's records of craft work and 30 marks are kept for the practical and oral test. In Bihar 300 marks (400 marks for those who do not take English as an additional optional subject), in classes 6-7 are assigned for craft work. These marks are out of a total of 1,000 marks. The other syllabii are silent about the details of assessing craft work. The little information gathered from the syllabii and the information supplied by some of the States in response to our questionnaire, has been consolidated in table 6, given below :

TABLE 6

Assessment in Craft Work

State	Primary stage		Middle stage	
	Junior Basic schools	Non-Basic Primary schools	Senior Basic schools	Non-Basic middle schools
Andhra	I		I	
	P	P	T	
	R	R	P	
			R	
Assam	I		I	
	E		E	
	W-36%		W-36%	
	T-50 marks		T-50 marks	
	P-50 marks		P-50 marks	
	R		R	

State	Primary stage		Middle stage	
	Junior Basic schools	Non-Basic Primary schools	Senior Basic schools	Non-Basic middle schools
Bihar	I W-50% T-50 marks P-150 marks R	I W-50% T-50 marks P-150 marks R	I W-50% T-50 marks P-150 marks R	I W-50% T-50 marks P-150 marks R
Gujerat	I E W-35% T-20 marks P-40 marks R-40 marks		I E W-35% T-20 marks P-40 marks R-40 marks	
Madhya Pradesh	W-33%	W-33%	W-33%	W-33%
Madras	I T-20% } P-80% } R		I T-20% } P-80% } R	
Maharashtra	I E W 35% T 20% } P 40% } R 40% }		I E W-35% T-20% } P-40% } R-40% }	
Orissa	I W-7% T	I W-7% T	I W-7% P-30 marks R-20 marks	I W-7% P-30 marks R-20 marks
Rajasthan	I P W 36% R 3. Tests 30 marks Half yearly 70 marks Annual 100 marks	I P W12½% of the aggregate R 3. Tests 30 marks Half yearly 70 marks Annual 100 marks	I T P W 12½% of the aggregate R 3-Tests 30 marks Half yearly 70 marks Annual 100 marks	I T P W 36% R 3. Tests 30 marks Half yearly 70 marks Annual 100 marks
Uttar Pradesh	I W-16% T } 16% P } R	I W-16% T } 16% P } R	I W-16% T } 16% P } R	I W-16% T } 16% P } R
West Bengal	I W-20% T } 50% P } R-50%		I W-30% T } 50% P } R	

Note : I—denotes that craft is an examination subject.

I—denotes that internal examination is held in crafts ;

E—denotes that external examination is held in crafts.

W—denotes the weightage given to craft work in the annual examination, i.e., the percentage of the total examination marks allotted to craft wark.

T—denotes that examination is held in the theory of crafts.

P—denotes that examination is held in practical work in crafts.

R—denotes that records of craft work are maintained. Where some marks or percentages are written against TPR, they denote the total marks or percentage of marks allotted to each of these.)

The table shows that in all the States except Madhya Pradesh craft is an examination subject in elementary schools run on Basic pattern. In Bihar, Orissa, Rajasthan and U.P., craft forms an examination subject in all the elementary schools. The reason for this in U.P. is that there are in that State only Basic schools. In all the States the examination conducted in crafts is internal examination but in Assam, Gujarat and Maharashtra the internal examination is supplemented by an external examination. About the weightage given to craft work in the annual examination, the information has not been received from Andhra and Madras. In other States, the weightage varies. The maximum weightage 50% of the total marks is given in Bihar. The weightage in Assam is 36%, in Gujarat and Maharashtra is 35% and 33% in Madhya Pradesh. In Rajasthan 36% in junior and senior Basic schools and 12½% of the aggregate in non-Basic primary and middle schools. In West Bengal 20% of the total marks are allotted to craft work in primary classes and 30% in middle classes. Comparatively small weightage, only 7% is being given in Orissa. The general pattern of assessment in craft work involves theory of craft work, practical in craft work and the records of craft work maintained throughout the year. The weightage given to these three components in the assessment of craft work, however, varies from State to State. The maintenance of records of craft work seems to be a commonly accepted practice in all the States except Madhya Pradesh; although the records are not taken into consideration in the annual assessment of craft work in every state.

Accounts for *individual States* based on the analysis of the syllabii and the responses received from some States are given in Chapter V.

Part B : Secondary School Level

An attempt is made in this part of the chapter to survey the existing position of craft education in the secondary schools. There are two sections. Section I is based upon the analysis of the syllabii of secondary schools and some information received from a questionnaire submitted to the States. The Syllabii for secondary schools relate to different types of schools such as high schools, higher secondary schools, multi-purpose schools and post-Basic schools. It was not possible to obtain the syllabii for all types of schools from each State so that in some cases inferences are based on the syllabii available in the local libraries. For some States more than one syllabus was studied. It was not possible, however, to determine the extent or the relative number of schools in which the various syllabii for a particular State were at present being followed.

The first section of the present chapter does not depict how far the syllabii and the expectations of the State Education Departments are being actually practised in the schools. Section II, however, does give an idea of the actual craft-practices as they obtain in the secondary schools of the States. This information comes from an analysis of 730 replies received from the secondary schools in different States in response to a questionnaire (the questionnaire is reproduced in appendix III.)

Analysis of Syllabii

At the secondary stage of education slightly different types of syllabii are available from high schools, higher secondary or multi-purpose high schools, technical high and higher secondary schools and post-Basic schools. The high school or matriculation stage usually consists of classes IX & X preceded by the elementary (primary and middle) stage of 8 years. The higher secondary or multi-purpose schools usually have classes IX, X & XI. In Mysore, Orissa, Gujarat, Maharashtra and Madras the higher secondary or multi-purpose high school stage is comprised of classes VIII, IX, X & XI, preceded by an elementary course of 7 years. It is not known as to what percentage of schools in a particular State follow the higher secondary or multi-purpose or old high school pattern. It may be useful to keep in mind, however, that the general trend is to shape the secondary education on the pattern of multi-purpose high school or higher secondary school as recommended by the Secondary Education Commission.

Status of Crafts in the Secondary Schools

In all the higher secondary school syllabii or multi-purpose school syllabii mentioned in appendix VI, excepting those of Delhi and U.P. craft occupies a place as a compulsory subject. In addition to the compulsory craft work the optional or elective papers include a few craft subjects such as, an agricultural group, crafts group or a technical group dealing with engineering subjects. These can be offered by a candidate as elective papers in the diversified scheme. In the syllabii dealing with high school technical examinations mostly engineering subjects including of course, a few craft subjects, are compulsory. The high school syllabii with the exception of Orissa and Himachal Pradesh do not give any compulsory place to craft work. Either there is no craft work at all (excepting girls' schools where home science is generally a compulsory subject) or crafts can be offered as one optional paper chosen from among five or six.

The status of crafts in the secondary schools as inferred from the syllabii and the information received from some States is summarised in table 7 below.

While the table is largely self-explanatory, it might be mentioned that in the State of Madras craft forms a compulsory subject in class VIII of the high schools as well as higher secondary schools. For other classes of high schools and higher secondary schools it is an optional subject excepting for the candidates offering the academic course. In West Bengal craft work is compulsory in girls' high schools and optional in boys' high schools. In higher secondary schools it is compulsory but taught only in class IX.

TABLE 7

Status of Crafts in the Secondary School Syllabii

State	Type of Schools			
	High schools	Higher Secondary schools	Multi-purpose schools	Post-Basic schools
Andhra	C	—	C	
Bihar			O	O
Gujarat	—	—	C	C
Jammu & Kashmir	Nil	—	—	—
Kerala	—	—	C	—
Madhya Pradesh	O	C	—	—
Madras	C (8th class) O	C (8th class) O	—	C
Maharashtra	O	—	—	—
Mysore	—	C	C	—
Orissa	C	C	—	C
Punjab	—	C	—	C
Rajasthan	—	C	C	—
Uttar Pradesh	O	O	O	—
West Bengal	O	C	C	C
Delhi	O	O	C	—
Himachal Pradesh	C	C	Nil	Nil

*C stands for craft as a compulsory subject; O stands for craft as an optional subject; Nil denotes that no crafts are practised ; — denotes that the position is not known.

Objectives

As is clear from the above account, craft forms a core subject in the higher secondary scheme being gradually adopted in the States. The specific objectives for craft teaching have not been clearly stated in most of the syllabii. But since crafts have been incorporated and introduced in the new syllabii of the higher secondary scheme at the suggestion of the Secondary Education Commission, the objectives as given in this Report are restated below :

"We expect this (secondary) school to devote special attention to craft and productive work and thus redress the balance between theoretical and practical studies which has been upset for many, many years. It will have a lively appreciation of the basic truth that the education of a mind is essentially a process of revivifying in it the latent value. contained in the goods of culture. In this process, educationally productive work, both intellectual and practical, plays a very important part ; in fact it is the finest and most effective medium of education. It will, therefore, be reflected both in its curriculum and methods—that is, on the one hand, different practical subjects and craft work will find a place in the curriculum on the same status as the so-called 'liberal' studies and on the other, the teaching methods will partake of the nature of activities and stimulate independent work. Every well established and reasonably well financed school will have workshops and craft-rooms where students will learn to handle tools and to fashion different kind of materials into form. They will not be merely 'flirting' with something called handwork, which often offer little stimulating challenge to their practical aptitudes, but will actually be confronted with real jobs of work which will genuinely stretch their powers. These craft-rooms, workshops (and farms), no doubt, are specially meant for students who offer practical subjects like agriculture, engineering, domestic science, etc., but they will also provide suitable practical occupations for all students including those who take up sciences or humanities or art subjects. Likewise, the school laboratory will not be a toy-affair, where a few simple and carefully planned experiments are performed under vigilant eye of the teacher who sees that the prescribed routine is followed. It will endeavour to give them something of the thrill and the joy of discovery and the educative experience of learning through trial and error. It would be wrong to imagine that practical work of this type cannot be carried out in secondary schools." (Pp. 218—219).

Again while emphasising the aims and objectives of the introduction of crafts or vocational bias in the secondary schools, the Commission stated: "So far as the second major element in our national situation is concerned, we must concentrate on increasing the productive or technical and vocational efficiency of our students. This is not merely a matter of creating a *new* attitude to work—an attitude that implies an appreciation of the dignity of *all* work, however, 'lowly', a realisation that self-fulfilment and national prosperity are only possible through work in which *every* one must participate and a conviction that when our educated men take *any* piece of work in hand they will try to complete it as efficiently and artistically as their powers permit. The creation of this attitude must be the function of every teacher and it must find expression in every activity of the school. Students must acquire a yearning for perfection and learn to take pride in doing everything as thoroughly as they can; likewise teachers should learn to reject, firmly but with sympathy, all work that is half-hearted or slipshod, or casual. Side by side with the development of this attitude, there is need to promote technical skill and efficiency at all stages of education so as to provide trained and efficient personnel to work out schemes of industrial and technological advancement. In the past, our education has been so academic and theoretical and so divorced from practical work that the educated classes have, generally speaking, failed to make enormous contribution to the development of the country's natural resources and to add to national wealth. This must now change and, with this object in view, we have recommended that there should be much greater emphasis on crafts and productive work in *all* schools and, in addition, diversification of courses should be introduced at the secondary stage so that a large number of students may take up agricultural, technical, commercial or other practical courses which will train their varied aptitudes and enable them either to take up vocational pursuits at the end of the Secondary course or to join technical institutions for further training. These measures will, we hope, result in equipping educated young men—psychologically and practically—to undertake technical lines and raise general standards of efficiency, thereby helping to increase national wealth and ultimately to improve the general standards of living" (page 27).

These quotations from the Report of the Secondary Education Commission make it clear that the purpose of including compulsory craft work in the higher secondary schools is not to prepare children for a particular vocation in life but to make them vocationally minded and to help their all round development. The conception of craft work as general education is also supported by the fact that even in the technical and vocationally oriented courses of the agricultural high schools of Gujarat, some crafts are included along with other core subjects like elementary mathematics, social studies and general science. This is in addition to specialisation in agriculture. (Syllabus for secondary school standards VIII to XI, Baroda, 1960, page 93). To quote the object of craft teaching according to the Mysore syllabus (No. 6 in appendix II), it is "Not to make the children vocationally efficient but only to make them vocationally minded and to develop the latent abilities of the children. It may not be possible to make the children vocationally efficient in the five periods of craft instruction in the VIII standard and in the two periods of instruction in the standards IX to XI. The subjects provided under electives or diversified courses of study are meant to make the pupils vocationally efficient. A pupil is at liberty to take a compulsory subject related to the optional group which is studied by him to make him vocationally more efficient. The compulsory crafts are meant to afford opportunities to children to use their hands in conjunction with their head or mental powers in order to develop their practical skills and to bring out their latent mechanical or vocational aptitudes, ability to handle tools efficiently will instill confidence in a child in the use of its mental powers, for ability to use a tool or to work out a theorem in mathematics is motivated by the same mental process. Crafts will also provide some relaxation to the children from purely mental work besides developing their skill and aptitudes. Therefore, a study of crafts under compulsory "A" group of subjects is a step in the right direction."

The list of the crafts prescribed in the higher secondary and multipurpose schools is given in table 8 below. The States prescribing each of these crafts have been indicated by a tick (/) mark against the respective crafts.

TABLE 8

	Name of States in which prescribed													
Name of Craft	Andhra Pradesh	Assam	Bihar	Gujarat	Kerala	M. P.	Madras	Mysore	Punjab	Rajasthan	U. P.	W. Bengal	Delhi	H. P.
Hand spinning and weaving		/	/	/	/	/	/	/	/	/	/	/	/	/
Wood work			/	/	/	/	/	/	/	/	/	/	/	/
Metal work			/		/	/	/	/	/	/	/	/		
Gardening		/	/		/	/	/	/	/	/		/	/	/
Tailoring	/	/		/	/	/	/		/	/	/	/	/	
Leather work		/			/	/	/	/	/	/	/	/	/	

Name of Craft	Name of States in which prescribed													
	Andhra Pradesh	Assam	Bihar	Gujarat	Kerala	M. P.	Madras	Mysore	Punjab	Rajasthan	U. P.	West Bengal	Delhi	H. P.
Sewing, needle Craft and embroidery.	/			/		/	/		/	/	/	/		/
Clay modelling and paper mache.			/		/	/	/	/	/	/	/	/		
Printing technology.									/			/		
Workshop practice.						/				/		/		
Radio mechanics.				/								/		
Bee-keeping					/									
Rattan work					/			/						
Sugar cane								/						
Black smithy.								/						
Book-binding card board work and printing						/	/	/			/			
Laundry								/						
Photography								/						
Electrical wiremen							/	/						
Foundry								/						
General engineering										/				
Stenotyping										/				
Cooking	/			/			/			/	/			
Paper work	/					/								
Agriculture			/	/		/				/	/		/	
Fine Art and Craft				/										
Brick making						/		/						
Typography				/		/								
Basketry and rope making						/		/						
Cane work	/					/					/			

Name of Craft	Name of States in which prescribed													
	Andhra Pradesh	Assam	Bihar	Gujarat	Kerala	M. P.	Madras	Mysore	Punjab	Rajasthan	U. P.	W. Bengal	Delhi	H. P.
Sericulture	/													
Soap making						/		/						
Fitters						/		/						
Pottery and ceramics.			/					/			/			
Tobacco cultivation								/						
Coffee cultivation								/						
Chalk making and plaster work								/						/
Bamboo work		/	/			/		/		/	/			
Coir work								/						
Pisciculture								/						
Sandal wood carving and ivory work								/						
Oil pressing								/						
Dying and printing								/						
Elementary agriculture														
Engineering								/						
Toy making			/											
Furniture design and estimating	/			/										
Abri making														/
Ink making														/

Hand-spinning and weaving, wood work, gardening, tailoring and leather work are some of the most popular crafts. Hand-spinning and weaving take the first position as it is common in the syllabii of all the States except Andhra Pradesh. Next comes wood work which is not included in the syllabii of the States of Andhra as well as Assam. Gardening and tailoring are no less important as except Andhra, Gujarat and Uttar Pradesh in the case of gardening, and Bihar, Mysore and Uttar Pradesh in the case of tailoring all the other States have prescribed it. Though next position is taken up by leather work ; sewing needle craft and embroidery, clay modelling, paper mache and metal work are no less mportant as they are included in the syllabii of 9 States out of the total of 14.

There are, however, slight variations among the different States as regards the number of alternative crafts suggested as well as the clsses in which they are taught. In Kerala, for instance, crafts offered under compulsory subjects include gardening and bee-keeping only. Other crafts could be taken as one of the optional papers. In West Bengal and Gujarat radio work is also included in the list. In Mysore considerable number of other crafts, such as black-smithy, fitters book-binding and printing, laundry, photography, electrical wire-men foundry, pattern making, sugar cane, cotton cultivation coconut cultivation, coffee cultivation, cigarettes, tobacoo industry care of form animals, etc., are included. It is clear that some of these such also photography, electrical wiremen, pattern making, etc., are more of a technological nature than they are crafts. Similarly, in Rajasthan steno-typing and general engineering are included in the list, so that student could take one of these as one of the compulsory core subject under crafts. In Orissa, alternatives like repairs and maintenance of reciprocating pumps, clocks, cycle, patromax lamps, armature winding house wiring, cane work, brick work and tile making are also mentioned in the Mysore syllabus it is mentioned that one or more crafts may also be practised if they are provided in the school.

The crafts actually practised in the schools of these States can be seen from table 14.

Time Devoted to Craft Work

Because most of the syllabii analysed do not mention the exact time to be allotted to craft, how much time is devoted to craft as a core subject in the higher secondary syllabii of various States was not discovered, Information about the allotment of time to craft work derived from some of the syllabii as well as a few responses to our questionnaire received from the States, has been summarised in the table given below :

Table 9

Time Devoted to Craft Work per Week

State	High Schools	Hr. Secondary schools	Multipurpose schools	Post-Basic schools
Andhra	45 mts	—	4 periods of 40 mts. each	—
Assam	—	—	9hrs.	—
Gujarat	—	3·4 periods	10-12 periods	—
Kerala	—	—	70 periods per year	—
Madhya Pradesh	2 hrs.	2 hrs.	2 hrs.	2 hrs.
Madras	2 periods	—	—	24 periods.
Mysore	—	1½ hrs.	1½ hrs.	—
Rajasthan	—	3 periods of 35 to 40 mts. each	6 periods of 35 to 40 mts. each	—
Uttar Pradesh	4 hrs.	4 hrs.	4 hrs.	—
West Bengal	—	—	3 hrs.	15 hrs.
Delhi			2½ hrs. to 3 hrs.	
Himachal Pradesh	2 hrs.	2 hrs. 40 mts.	Nil	Nil.

It will be seen that only 12 States give this information and that too is not complete. Some of the States have not stated the time in hours and it is difficult to estimate the duration of periods. Hence, any comparisons or conclusions become difficult.

Assessment of Craft Work—Weightage given to Craft Work and Mode of Examination :

The weightage given to craft work in grade to grade promotion as well as in the final examination for the stage could be judged to some extent by determining whether or not craft is an examination subject and how many marks out of the total marks are assigned to it for the secondary examination. Most of the syllabii have not mentioned anything about this aspect of the organisation of craft work in schools. Even when some States supplied this information in response to our questionnaire it was incomplete. Whatever facts we have about the weightage given to craft work are summarised, below in table No. 10,

Table 10

Name of State	High School	Hr. Secondary	Multipurpose	Post-Basic
Andhra			—/ I P R	
Bihar	—/ I E W—30% T 160 P 80 R		—/ I-40 E W—30% T 160 P 80 R	—/ I—40 E W—30% T 160 P 80 R
Gujarat			—/ W (35%)	—/ W (35%)
Madhya Pradesh		—/ W (10% approx.)		
Orissa		—/ W (10% approx)		
Punjab		—/ E W (50 marks out of a total of 400 marks alloted to compulsory subjects) P		

Name of State	High School	Hr. Secondary	Multipurpose	Post-Basic
Rajasthan		—/ I E W—36% R	—/ I F W—36%	
Uttar Pradesh	—/ I E W (33%—is treated as equal to two subjects) T P R(Not considered in annual examination)	—/ I E W (33%—is treated as equal to two subjects) T P R (Not considered in annual examination R	—/	
West Bengal			—/ W (—) I T P R	—/ W (—) I T } 50% P } R 50%
Delhi			I E W—12.5% T 25% P 75 % R 20%	
Himachal Pradesh		—/ W 50 marks P 50 marks		

Note :

—/ denotes that craft is an exmination subject.

I denotes that internal examination is held in craft.

E denotes that external examination is held in craft.

W denotes the weightage given to craft work in the annual examination i. e. the percentage of total examination marks allotted to craft work.

T denotes that examination is held in the theory of crafts.

P denotes that examination is held in practical work in crafts.

R denotes that records of craft work are maintained.

Where some marks on percentages are written against T, P, R, they denote the total marks or percentage of marks allotted to each of these.

In Punjab 50 marks out of a total of 400 marks for the compulsory subjects in the higher secondary examination are assigned for craft. This examination consists of a *viva voce* practical test in crafts and a candidate must obtain 33% marks in each of the core subjects including craft. Craft also forms one of the elective groups offered in the syllabus. These carry a total of 600 marks. A student is required to choose any one elective group in addition to the core subjects. Thus the syllabus has a provision for intensive specialisation in the field of crafts for the students choosing to study this subject.

In Orissa and Madhya Pradesh 100 marks out of a total of 1000 or 1100 marks are allotted for craft work. In Bihar 30% of the total marks are allotted to the craft work. In the examination, 160 marks are for theory and 80 for the practical. There is internal examination also and the records of the craft work are maintained in High schools, Multipurpose schools as well as post-Basic schools. 40 marks are allotted for internal assessment in Multipurpose schools and post-Basic schools only.

In Multipurpose schools of Delhi 12.5% marks out of the total number are allotted to craft work. There are 25 marks allotted to theory and 75 to practical. 20% marks are kept for the record.

In Himachal Pradesh Higher Secondary Schools 50 marks are allotted for the practical examination of the craft.

In Rajashtan according to the information received from the Director of Education, Rajasthan, craft is an examination subject in only Higher Secondary and Multipurpose schools. 36% weightage is given to this subject. However the information received from one of the training colleges indicates that craft is also a subject in High schools and Post-Basic Schools. Both internal and external examinations are held. Regular record is kept and 10% marks are allotted to it. On the whole 33% weightage is given to this subject in high schools, higher secondary, multipurpose schools as well as post-Basic schools.

In the multipurpose schools of Gujarat 35% of the total marks are allotted to examination in craft work. The other details are not known. In Uttar Pradesh craft is treated as equivalent to two subjects and 33% marks are devoted to it. In West Bengal only an internal examination is held in craft work in the multipurpose schools and the marks of tests in the theory of craft work, practicals and records are taken into consideration. In Post-Basic schools 55% of the marks are devoted to internal records and 50% to the internal examination. In Andhra records of craft work are maintained in the multipurpose schools and there is an internal practical examination also.

The importance of craft work may also be judged from the fact that this is a core subject in the higher secondary scheme and passing it is compulsory. The following excerpt from the higher secondary examination syllabus of Rajasthan may also be found useful:

"Every student will be required to pass in the craft offered by him but marks obtained by him will not be added to total marks for determining division. Only a mention will be made in a candidate's certificate that he has passed in a craft.

"Candidates failing in craft will be given two chances to pass the same, one at the supplementary examination immediately following the examination at which they fail and the other at the next main examination. This concession will be available to those who had passed in practical portion. In case of failure at both the attempts they will be required to appear in and pass at the whole examination again.

"The failures in practicals will be given only one chance. They will appear at the next main examination only—both in theory as well as practical of the craft concerned and in case they fail at it they will have to appear at the whole examination again. The result of a candidate who passes in all the subjects except craft shall not be declared unless he/she passes in the same as above."

ANALYSIS OF QUESTIONNAIRE

Introduction

This section of our report on craft in the secondary schools of India is based on the replies submitted by such schools to a questionnaire prepared and issued by the Directorate of Extension Programmes for Secondary Education. High schools, higher secondary schools and multipurpose schools responded to the questionnaire which included 58 items relating to the various aspects of the teaching of craft. Among the items were some relating to the status of craft in the schools, to the objectives of teaching crafts, to the craft curriculum, to the physical facilities available, to craft teachers and their teaching and evaluation practices. A copy of the questionnaire appears in appendix III.

Most of the questionnaire items were designed to elicit 'yes' or 'no' answers. There were a few open—ended questions asking for special features of craft teaching in the schools, or for steps being taken to promote craft work or for suggestions for the improvement of craft instruction.

Replies to the questionnaire were received from all the states and centrally governed territories excepting Punjab, Assam, Manipur, Tripura Pondichery, Andaman and Nicobar islands. Responses from Delhi and Kashmir were few (5 and 6 respectively) and have not been included in this report which deals with 12 states: Andhra, Bihar, Gujarat, Kerala, Madhya Pradesh, Madras, Maharashtra, Mysore, Orissa, Rajasthan, Uttar Pradesh and West Bengal. The number of replies from the various States are given in Table 11. This table gives separate figures for each of the 3 types of secondary schools which are sub-divided into schools for boys, schools for girls and co-educational schools.

The main body of this section is an analysis of the various aspects of craft teaching in the secondary schools on an all-India basis. In addition to this general report a detailed description has been prepared for each of the states. These state reports are given in Chapter V (b).

The all-India report and the reports of the states are presented under several headings. The general information about crafts is presented first and deals with the status of craft, objectives of craft teaching, crafts taught in the secondary schools and the craft curriculum. This is followed by a description of the physical facilities for craft including accommodation, equipment and disposal of craft products, (2) information about craft teachers and their training, (3) evaluation practices, and (4) a report of special craft features, steps being taken to promote craft instruction and suggestions for improving craft teaching.

TABLE 11

	High Schools			Hr. Sec. Schools			Multipurpose Schools			TOTAL
	Boys	Girls	Mixed	Boys	Girls	Mixed	Boys	Girls	Mixed	
Andhra	13	7	18	3	3	12	16	4	4	80
Bihar	13	2	17	1	0	7	5	1	4	50
Delhi	..	..	..	4	1	..	..	..	..	5
Gujarat	7	7	30	1	1	0	0	0	4	50
Jammu & Kashmir	3	0	0	2	1	0	0	0	0	6
Kerala	8	17	46	5	0	7	1	1	3	88
Madras	20	9	19	0	0	0	6	3	19	76
Madhya Pradesh	1	0	2	17	11	21	9	0	5	66
Maharashtra	11	6	26	3	0	0	2	4	9	61
Mysore	5	12	24	9	3	9	2	2	10	76
Orissa	7	1	12	1	1	3	0	0	0	25
Rajasthan	9	1	4	6	1	7	4	0	1	33
Uttar Pradesh	8	2	2	37	2	3	1	0	2	57
West Bengal	0	2	0	7	5	0	30	7	6	57
TOTAL	105	66	200	96	29	69	76	22	67	730

The information on which the all-India report and the reports of the various states are based, is subject to several limitations which have already been mentioned in Chapter on Introduction.

Even with these limitations, the questionnaire responses give a rather good idea about crafts in secondary schools of India. The limitations have been taken into account in the style of preparing the report which is not intended to provide exact quantitative information. It does give, however, general information which may be helpful in understanding many aspects of craft teaching in secondary schools.

Craft teaching in the secondary schools of different states

Craft now occupies a definite place in all but a few of the secondary schools of India. In many schools, crafts have been introduced only recently. Most of the schools answering the questionnaire indicated that craft is a compulsory subject. In some schools it is both compulsory and optional and in some it is optional. Table 12 gives the percentage figures of schools in respect to these three positions.

It was not made clear how craft could be both compulsory and optional as was claimed by some schools.

As Table indicates, in all the States except Uttar Pradesh at least 72% of secondary schools have craft as a compulsory subject. In 52% the schools reporting from Uttar Pradesh craft is compulsory. 24%

of the schools in that State have craft as an optional subject. In Madras 15% and in Orissa 12% of the schools have craft as an optional subject. On the whole craft seems to be well accepted as a compulsory subject.

TABLE 12

Status of crafts in secondary schools of the different states

State	Percentage of schools indicating crafts as			Percentage of schools answering that crafts in schools are linked with those prescribed in the area.
	Compulsory	Optional	Both	
Andhra Pradesh	85	9	7	72
Bihar	90	8	2	78
Gujarat	92	2	6	68
Kerala	92	5	3	70
Madras	72	15	13	77
Madhya Pradesh	94	2	4	74
Maharashtra	95	2	3	67
Mysore	91	—	9	81
Orissa	83	12	4	83
Rajasthan	88	6	6	73
Uttar Pradesh	52	24	24	72
West Bengal	91	2	2	68

As far as the teaching of crafts in different grades is concerned there seem to be three main patterns. In most of the schools crafts are introduced in the 6th standard and continue upto the 10th or 11th standard. In some schools craft is introduced earlier and does not go beyond the 8th standard. In other schools craft is introduced much earlier and continues throughout the secondary stage. It is quite difficult to give overall figures about the various classes. The reports for the individual States (Chapter V) contain information on this aspect.

Most of the schools report that the crafts taught in them are linked with those practised in the surrounding areas. The percentage figures in Table indicate that atleast 67% of the schools in all States have this feeling. This at least suggests that crafts may be selected on the basis of local conditions.

Objectives

The ten objectives appearing in the questionnaire have been checked by the schools from all the States and Table 13 summarises the results.

From this Table it appears that the most generally accepted objective is that of inculcating dignity of labour. The percentage of schools, endorsing this objective, ranges from 67 to 92. The objective second in acceptability appears to be that of providing a vocational

TABLE 13

Percentage of schools checking the various objective since introducing craft education in the curriculum

	a	b	c	d	e	f	g	h	i	j
Andhra Pradesh	69	72	61	72	70	56	49	34	62	65
Bihar	48	54	60	92	60	62	52	30	38	38
Gujarat	44	48	60	76	50	52	52	22	46	56
Kerala	65	75	71	79	62	66	52	30	61	62
Madras	62	60	67	72	47	54	48	24	58	50
Madhya Pradash	57	53	57	75	63	45	44	26	48	48
Maharashtra	65	67	67	68	54	59	36	23	36	62
Mysore	58	73	59	73	59	45	39	26	50	32
Orissa	79	67	50	67	58	42	50	25	37	62
Rajasthan	52	73	62	82	55	61	58	45	61	64
Uttar Pradesh	60	72	60	79	60	65	52	23	49	63
West Bengal	56	70	68	80	70	56	47	28	42	70

N. B. The various letters refer to the 10 objectives mentioned in Question No. 6—Appendix III.)

outlet to pupils. The percentage of schools checking this objective is quite high and ranges from 48 to 75. The percentage figures indicate that the least accepted objective appears to be that of offering opportunities for guided exploration and experimentation in practical situations. The percentages of schools who accept these objectives range from 22 to 45. The objective of giving pupils confidence to use inexpensive and locally available materials is also not highly accepted. The percentage figures range from 36 to 58.

Crafts taught

The different schools from all the States responding to the questionnaire have listed as many as 41 crafts in all. Frequency of mention is reported in Table 14 which includes crafts as they were mentioned by the different schools. Consideration was not given to the question as to whether or not a subject mentioned by a particular school could legitimately be called a craft. For example dramatics, drawing, music, steno-typing, typing etc., have been called crafts by some schools and have been included in the list. The exact words used to denote the crafts by the schools have been included in the Table as far as possible. The figures given are the percentages of the total number of schools in a State, irrespective of its type.

It will be clear from Table 14 that spinning is one of the most popular crafts in all the States except U.P., West Bengal, Mysore and Orissa. Only 9% schools in West Bengal and 10% in Mysore seem to practise spinning. Agriculture is a popular craft in Mysore and Andhra. West Bengal schools have clay work and embroidery as important crafts after wood work which seems to be the most popular in that State. Wood work also occupies an important place in the schools of Madras, Orissa, Maharashtra and Madhya Pradesh. Among crafts for girls, embroidery seems to be quite popular except in Uttar Pradesh. Gardening also is among the more popular crafts. As many as 60% of the schools in U.P., have reported to be practising gardening. In Andhra 33% schools and in Bihar 22% schools practise gardening. The figures appearing in Table 14, as has been mentioned, are the consolidated figures for each State. Differences in crafts practised in boys and girls schools or in high schools, higher secondary schools and multi-purpose schools, are not indicated. The various tables appearing with the reports of the individual States describe the position of crafts practised in the various types of schools. The differences among the types of schools are also discussed in the State reports.

Most secondary schools provide only one craft for a student at one time. The percentage of schools offering only one craft to a student exceed 65 in all States.

The various reasons given in the questionnaire for the selection of crafts by students have been checked by the different schools. The percentage figures appear in Table 15. It is clear from this Table that in most of the schools students select a craft because it is provided. The percentage of schools endorsing this reason for craft selection by pupils range from 69 to 90. The reason next in importance seems to be the selection on the basis of the student's aptitude. The figures in this connection for Uttar Pradesh is as high as 42 and for Madras it is 41. It is not clear, however, from the replies to these questions how aptitude is determined as a basis for selection. Probably most of the schools mean that the students choose a craft on the basis of their own interests. Other reasons for choosing a particular craft have been endorsed by smaller numbers of schools. One reason which emerges from the table is the preference of the teacher. It is difficult to say how this factor differs from the first factor, i.e. the provision of the crafts in the schools. In some schools the actual provision of crafts may be based on the choice or at least on the competence of the teacher.

On the whole it appears that more than half of the schools in any state do not have any provision for change of craft during the secondary school course. This is made clear by Table 15. The possibility of a pupil changing craft is discussed in detail for each state in chapter VI. In some States such changes are quite common, as in Uttar Pradesh, Bihar and Madras. Other states, for example West Bengal, do not seem to provide for the possibility of change in craft during the secondary education course.

Curriculum

Four questions in the questionnaire had to do with curriculum content. The majority of the schools in different States express satisfaction with curriculum content bearing on the application of craft in daily life. The percentage figures appearing in Table 16 show that at least 75% schools in any state are of the opinion that this content is appropriate. The next important aspect of the content is the inclusion of material relating to manipulative skill. The percentage of schools endorsing this ranges from 54 to 87. There is greater variation with regard to curriculum content which emphasizes the scientific basis of crafts. Some States like Gujarat have high percentage of schools which seem to be satisfied with this. Some other states like Orissa, with 37% affirmative responses to this part of the questionaire, feel less satisfied about the curriculum content dealing with the scientific basis of craft. The figures on the whole seem to show that the secondary schools are not much dissatisfied with the curriculum content.

TABLE 14

Percentage of Secondary Schools Teaching Various Crafts

Crafts	Andhra	Bihar	Gujarat	Kerala	Madras	Madhya Pradesh	Maha-rashtra	Mysore	Orissa	Rajas-than	Uttar Pradesh	West Bengal
1. Agriculture	21	10	10	—	5	—	2	41	—	9	19	—
2. Bee-keeping	—	2	—	—	—	—	—	5	—	—	—	—
3. Book-binding	41	—	—	31	8	—	13	5	—	9	60	—
4. Cane work	4	—	—	6	1	—	—	—	—	—	—	4
5. Cardboard work	5	2	—	2	3	4	21	1	—	18	7	—
6. Clay work	8	2	—	—	—	2	3	4	—	12	2	21
7. Doll-making	1	—	—	—	—	—	—	—	—	7	4	5
8. Dramatics	—	—	—	—	—	—	—	17	—	—	—	—
9. *Drawing*	14	4	—	—	25	8	3	8	—.	3	—	—
10. Embroidery	20	6	26	43	21	15	18	28	12 5	—	4	21
11. Fibre Craft	4	2	—	9	1	—	—	3	—	—	—	—
12. *Fishery*	—	—	—	1	—	—	—	1	—	—	2	2
13. Gardening	33	22	2	19	18	61	10	13	16.6	6	21	7
14. General Engineering.	1	4	—	—	—	3	—	—	—	6	—	—
15. Home Craft	16	4	—	1	12	—	2	5	4.2	—	7	7
16. Kitchen Gardening	—	46	—	—	—	—	—	—	—	—	—	—
17. Leather work	18	6	—	4	2	—	—	—	—	—	5	9
18. Metal Craft	3	6	—	2	2	1.6	—	—	—	3	5	16
19. Moulding												

TABLE 14 (Continued)

Crafts	Andhra	Bihar	Gujarat	Kerala	Madras	Madhya Pradesh	Maha-rashtra	Mysore	Orissa	Rajas-than	Uttar Pradesh	West Bengal
20. Music	1	—	—	—	9	—	—	5	—	6	2	—
21. Paper mache	1	—	—	—	—	—	—	—	—	—	—	—
22. Paper making	—	—	—	—	—	—	18	—	—	—	—	—
23. Paper work	18	2	—	3	4	—	—	1	4	9	11	14
24. Photography	—	—	—	—	—	—	—	3	—	—	—	—
25. Pottery	1	—	—	—	3	—	—	1	—	—	—	2
26. Printing	1	2	—	—	—	3	—	5	—	—	—	2
27. Rattan work	—	—	—	—	—	—	—	2.6	—	—	—	—
28. Sewing	8	2	16	14	3	14	25	—	8	3	4	4
29. Smithy	—	4	—	—	—	—	—	—	—	—	—	—
30. Soapmaking	—	2	—	—	—	6	2	4	—	—	—	—
31. Spinning	30	50	58	31	26	39	28	10	12	36	12	9
32. Steno-typing												
33. Tailoring	17	12	20	25	4	20	25	51	38	45	26	7
34. Tape-making	9	—	—	—	1	—	—	1	—	—	—	—
35. Technical subjects	1	4	—	—	—	—	2	8	8	—	21	16
36. Typing	—	—	—	—	—	2	—	4	—	—	—	—
37. Wax-work	—	—	—	—	—	—	—	—	—	—	—	2
38. Weaving	15	4	58	40	50	36	23	10	4	36	11	7
39. Welding												
40. Wood work	7	10	12	10	34	21	23	17	25	15	33	61

Table 15 gives the percentage of schools offering one, two, three or four crafts at a time to a student.

TABLE-15

Choice of Crafts by Students in Secondary Schools

State	Percentage of schools indicating No. of crafts offered by students.				Percentage of schools checking various reasons of offering crafts						Percentage of schools indicating that change of craft is possible during the secondary school course.
					Provision in school	Own aptitude	Hereditary nature of craft	Parents' choice	Teachers' choice	Others	
	1	2	3	4	a	b	c	d	e	f	
Andhra	65	15	8	2	81	34	22	15	20	14	42
Bihar	78	10	2	—	76	26	30	22	22	4	48
Gujarat	86	12	—	—	88	18	14	6	12	6	36
Kerala	70	20	2	—	81	21	9	7	20	8	36
Madras	73	12	3	2	76	91	16	13	10	7	47
Madhya Pradesh	90	8	—	1	77	32	11	11	8	8	39
Maharashtra	90	4	—	—	90	28	7	10	20	5	31
Mysore	72	10	2	—	69	30	14	12	14	4	30
Orissa	79	21	—	—	87	8	12	12	25	4	29
Rajasthan	81	12	3	—	88	36	24	15	27	18	42
Uttar Pradesh	84	7	—	2	70	42	7	35	17	17	52
West Bengal	70	10	2	—	80	30	7	2	17	2	12

Twenty percent of the schools in Kerala and Orissa provide for two crafts at a time. Only a small percentage of schools in other States provide for two crafts. The percentage of schools providing for three crafts is very small and only a few schools provide for four crafts.

As regards integration of the curriculum with the different aspects of the students' experiences not less than about half of the schools in any State, Gujarat being an exception, are satisfied with the integration with home and community experiences. Schools seem to be much less satisfied with the integration of the craft curriculum with the other subjects of the curriculum. In some States like Orissa as few as 21% of the schools are satisfied with this aspect of integration. A similar situation obtains in West Bengal, Bihar and Gujarat. As will be seen from the table 16. In no State, except Andhra, does the satisfaction percentage exceed 46. The percentages of schools in the several states expressing satisfaction with the integration of the craft curriculum with cocurricular activities range from 47 to 80. In most of the States approximately half of the schools seem to be satisfied with this aspect of the integration.

Schools generally seem to be satisfied with the curriculum in respect to the creative aspect of craft. Among the several states the satisfaction percentages range from 91 to 62 in this connection. With the exception of Orissa the satisfaction percentages are very high and do not fall below 76. Schools are equally well satisfied with those aspects of the curriculum designed to stimulate interest in students so that they may be able to pursue crafts even after secondary education.

TABLE 16

Percentages of schools answering in affirmative the various questions regarding craft curriculum

State	Curriculum content includes				Curriculum is integrated with			Curriculum stresses creative aspects	Curriculum stimulates interest in students
	Manipulative skill	Economics of crafts	Scientific basis of craft	Application in daily life	Home & community experience	Other subjects	Cocurricular activities		
Andhra	83	68	63	95	81	61	80	91	75
Bihar	62	54	54	76	74	34	62	78	54
Gujarat	68	86	86	90	46	36	60	78	52
Kerala	77	58	55	76	65	43	47	76	65
Madras	77	59	61	83	74	40	55	86	70
Madhya Pradesh	72	56	60	84	62	33	68	84	60
Maharashtra	76	61	68	90	74	43	55	82	66
Mysore	85	59	64	89	76	44	55	80	66
Orissa	57	41	37	86	66	21	45	62	62
Rajasthan	54	67	70	75	70	41	58	90	75
Uttar Pradesh	87	68	70	90	71	46	56	88	71
West Bengal	84	58	63	84	70	39	70	86	78

Physical facilities

The questionnaire items dealing with physical facilities refer to accommodation, equipment and disposal of crafts products. Each of these is commented upon separately below.

Accommodation

As was noted *before*, the question about the size of craft room has been differently interpreted by the respondents. Some interpreted the term to refer to the size of enrolment in the craft class while others understood the term to mean size of the craft room. For this reason it is quite difficult to make an inference about the average size of the craft room in the various schools. What information is available on this point is discussed in the reports of the States. On the whole it appears that schools have accommodation of about 500 sq. ft. for their craft class.

States differ with regard to providing separate rooms for craft classes. Table 17 gives the figures for the different States.

TABLE 17

Percentage of schools giving yes answers in affirmative to questions about physical facilities for craft teaching

State	Separate room for craft classes	The room provides adequate space.	The room is well lighted.	Adequate storing facilities.	Raw-material available in time.
Andhra	76	47	74	57	85
Bihar	20	42	52	36	68
Gujarat	90	80	96	78	92
Kerala	52	34	61	37	77
Madras	77	69	75	60	92
Madhya Pradesh	26	95	63	35	72
Maharashtra	67	64	86	68	86
Mysore	38	54	64	43	64
Orissa	83	50	79	26	83
Rajashan	24	48	27	39	18
Uttar Pradesh	70	65	77	56	91
West Bengal	66	63	82	56	77

States like Orissa, Gujarat, Madras, Andhra and Uttar Pradesh seem to be providing separate rooms for craft classes in the schools. In Kerala it appears that only half of the schools have separate craft class room. In Bihar, Rajasthan and Madhya Pradesh only about one fourth of the schools have a separate room for conducting craft classes.

The situation with regard to adequate storing facilities for craft products prepared by students as well as other supplies and materials appears to be much better. The States of Gujarat, Madras and Orissa seem to be better in this respect. In the States of Uttar Pradesh, West Bengal and Andhra about half of the schools have this facility available. In some States like Madhya Pradesh and Rajasthan, the situation is less satisfactory.

It is not clear whether the questionnaire items referring to the adequacy of space, room being well lighted or its suitabilities from other points of view were correctly understood. The responses imply that some schools interpreted these questions as referring to the room set aside for craft classes, while other schools understood it to mean the rooms used for craft classes whether separate or not. The percentage figures indicating adequate space in the craft teaching room ranged from 34 to 80. Some of the schools seem to be well satisfied with this aspect while others are dissatisfied. The percentage figures indicating room adequacy in respect to illumination and other factors are higher.

Equipment

Most of the schools in all states reported that availability of raw material to the students, in time, was not a problem. Figures for Gujrat, Uttar Pradesh, Madras, Orissa, Maharashtra and Andhra in this connection are very high. Only in Rajasthan do schools seem to be dissatisfied. In that state 18% of the schools report that raw materials are made available to the students in time.

The questionnaire devotes one question to the craft equipment available with the schools. From the replies expressed as percentage figures in Table 18, it appears that the schools on the whole are satisfied with the availability of raw materials and tools. The percentage figures indicating satisfaction with rawmaterials range from 82 to 51. Similarly, at least half of the schools in each state reported satisfaction with regard to the availabilty of craft tools. In Bihar, however, only 44% of schools reported satisfaction with craft tools. The figures indicating satisfaction with other items of craft equipment like tables, work benches, easels, show cases and display boards are comparatively lower. Fewer than half of the schools seem to be satisfied with these items of craft equipment.

In respect to satisfaction with the efficiency with which the available material is used, the figures are generally very high. With the exception of Rajasthan, where the satisfaction percentage is only 15, at least three fourth of the schools in many states report satisfaction with the efficiency with which craft materials are used.

Table 18 also gives figures indicating the percentageof schools. expressing satisfaction with the availability of instructional material Of the materials listed in the questionnaire, namely, text books, reference material, periodicals, teachers' file of material, pupils collection and craft models and charts, the schools seem in general to be satisfied with the availability of the last item, i.e , craft models and charts. Only one fourth of the Bihar and Kerala schools indicate satisfaction with the availability of craft models and charts. The largest percntages of satisfaction in this connection, 73%, represents West Bengal. Least satisfaction was expressed with the availability of periodicals. Although 72% of the West Bengal schools reported satisfaction in this respect. Figures representing the percentage of schools satisfied and other items can be seen from the table 18.

Teachers

Information about the number of teachers per craft in secondary schools as reported in the questionnaire does not appear to be accurate. However, the percentages of schools having less

TABLE—18.

Percentage of Schools Indicating Availability of Craft Equipment

State	Working facilities								Instructional material						
	Work benches	Tables	Cards	Tools	Show-cases	Display boards.	Raw material	Percentage of schools indicating that material is being used effectively	Text-books	Reference material	Periodicals	Teachers' file of material	Pupils collection	Craft models and charts.	Others
Andhra	46	45	31	70	31	27	75	22	34	35	19	45	41	65	9
Bihar	20	18	32	44	10	12	58	66	42	22	12	26	26	20	—
Gujarat	52	52	42	76	54	44	82	92	52	52	18	28	42	46	2
Kerala	24	25	16	52	9	12	61	73	25	18	9	37	32	25	—
Madras	42	39	31	72	25	31	80	94	25	33	16	38	37	54	—
Madhya Pradesh	30	35	27	53	15	17	51	79	44	44	19	30	37	38	—
Maharashtra	64	59	52	73	47	44	81	96	31	35	18	52	44	55	9
Mysore	38	43	30	56	24	20	54	68	44	31	23	33	24	38	8
Orissa	50	62	33	62	17	17	62	92	33	29	4	33	20	42	—
Rajasthan	42	52	39	73	24	30	70	15	70	48	27	66	70	64	4
Uttar Pradesh	66	68	49	72	30	38	73	91	47	44	19	49	52	60	10
West Bengal	58	58	40	66	33	28	68	75	35	47	72	30	45	73	—

than one teacher per craft (that is, one teacher teaches two, three or more crafts or there is no teacher for crafts at all), one teacher per craft or more than one teacher per craft, appear in Table 19. As will be seen from the table quite a large number of schools have at least one teacher per craft. The situation in Rajasthan and Maharashtra seems to be still unsatisfactory. Only 32% schools in Rajasthan and 38% schools in Maharashtra have one teacher per craft. Orissa provides one teacher per craft in all the schools. Mysore, Andhra, Madhya Pradssh, Kerala and Madras have large number of schools with one teacher per craft. 46% of the schools in Gujarat report that they provide more than one teacher. States of Uttar Pradesh, Bihar and Maharashtra are also well off in this respect.

The responses to the questions about the adequacy of staff for craft work vary from State to State. The range of percentages answering in the affirmative is from 31 to 92. Schools in Gujarat, Maharashtra and Uttar Pradesh seem to be very much satisfied about the adequacy of staff. In West Bengal, Rajasthan, Orissa, Mysore, Bihar and Andhra, at least half of the schools feel that they have adequate staff for craft work. Fewer schools in Madhya Pradesh and Kerala feel that they have adequate staff.

It appears that at least about half of the schools in any State are of the opinion that their teachers have received institutional training. A very large number of schools in Andhra, Gujarat, Kerala, Madras, Maharashtra, Orissa and West Bengal report this to be the case.

The questions asking the schools whether they experience difficulty in securing teachers who know their subjects well and who are pedagogically trained, indicate that at least 50% schools experience these difficulties. It may be difficult to relate replies to this question to the replies received to the question asking whether the teachers in the schools have received institutional training.

Few schools seem to be using untrained and unqualified artisans for teaching crafts. The exception seems to be West Bengal where 81% schools report that they are using untrained and unqualified artisans for teaching of crafts. The lowest figure is for the State of Madras. In various States 20% to 30% of the schools seem to be using unqualified artisans.

Generally it appears that schools are satisfied that their craft teachers use modern techniques. In three fourths of the States more than half of the schools report this to be the case. Fewer schools feel that craft teachers participate adequately in community craft activities. Only in Uttar Pradesh as many as 87% of the schools report that their craft teachers participate in the community craft activities. For other schools the percentages are quite low.

The qualifications prescribed for the craft teachers in several States were not mentioned by the schools. They did, however, give the qualifications of their own teachers. It is difficult to infer trends in this respect but the situation is discussed in the reports of the State. Generally it appears that the schools employ teachers who are Matric pass and who have had some training in crafts.

The information about the salaries given to the craft teachers, similarly, is not indicated clearly. The various patterns of salary grades

TABLE 19

Percentage of schools answering the various questions on staff position in crafts in affirmative

State	No. of teachers per craft			Staff is adequate	Teachers have received institutional training	Experience difficulty in securing teachers		Untrained and unqualified artisans are employed	Craft teachers use modern techniques	Craft teachers participate in community craft activities
	Less than one	one	More than one			Knowing subjects	Pedagogically trained			
Andhra	31	54	16	54	89	61	64	11	61	29
Bihar	13	48	39	56	56	56	60	20	40	44
Gujarat	4	50	46	92	94	56	58	14	54	28
Kerala	24	64	12	31	84	48	68	18	57	34
Madras	23	61	16	70	88	35	46	8	65	22
Madhya Pradesh	27	62	11	39	45	83	81	29	32	21
Maharashtra	36	38	26	84	76	50	59	18	61	21
Mysore	36	59	5	60	55	66	69	17	47	20
Orissa	4	12	4	68	82	66	68	20	41	83
Rajasthan	62	32	6	52	55	70	67	29	55	44
Uttar Pradesh	30	63	34	76	44	51	12	31	36	87
West Bengal	13	76	11	53	78	61	67	81	61	23

are discussed in the reports of the individual States which include the list of institutions that provide training facilities for craft teachers in each area.

Evaluation

Replies to the questions in the section on evaluation are difficult to interpret. About 50% of the schools mention that they maintain a record of pupil progress in crafts. In some States, for example Gujarat and Madhya Pradesh the figure is as high as 86%.

The other three aspects of evaluation namely, creative ability, technical competence and quantitative turnover, seem to be included in many cases in the records of progress maintained. The figures for the different States appear in Table 20—A but they should be interpreted with caution. From the table it is clear that about 38% schools seem to be evaluating technical competence while creative ability and quantitative turnover are evaluated by about 44% schools.

The question asking about the internal and external assessment of

TABLE—20—A

Percentage of schools evaluating different aspects of craft work

	Andhra	Bihar	Gujarat	Kerala	Madras	Madhya Pradesh	Maharashtra	Mysore	Orissa	Rajasthan	Uttar Pradesh	West Bengal
1. By maintaining a record of pupil progress.	55	82	86	42	56	86	78	52	52	81	72	61
2. By evaluating creative activities.	46	58	38	46	35	39	50	25	32	72	38	47
3. By evaluating technical competence.	46	40	40	35	31	29	25	30	48	56	48	33
4. By evaluating quantitative turn-over.	56	56	50	33	58	35	50	25	28	59	41	23

TABLE—20—B

Percentage of schools having internal and external assessment of craft work

	Andhra	Bihar	Gujarat	Kerala	Madras	Madhya Pradesh	Maharashtra	Mysore	Orissa	Rajasthan	Uttar Pradesh	West Bengal
1. Internal assessment.	76	60	60	59	76	86	77	56	64	50	72	80
2. External assessment.	6	4	—	5	3	6	3	2	8	6	9	—
3. Both	16	32	34	3	3	3	5	13	16	35	20	9

TABLE—20—C

Examination position in crafts in secondary schools
(Figures give percentages of schools)

States	Are examinations held in crafts ?		How often held in a year				Composition of the examination				Is a minimum no. of marks prescribed for a pass?		Are craft marks considered for promotion ?	
	Yes	No	Once	Twice	Thrice	Four times	Theory only	Practical only	Theory and practical	Viva voce	Yes	No	Yes	No
Andhra	42	58	5	10	24	—	4	7	34	9	30	63	14	88
Bihar	70	24	4	60	6	—	22	32	18	10	20	64	72	20
Gujarat	100	—	50	26	10	10	4	14	70	14	100	—	86	6
Kerala	66	34	6	7	8	—	9	3	15	2	32	68	10	62
Madhya Pradesh	82	12	16	21	45	—	6	10	59	24	84	9	60	36
Madras	40	59	8	4	16	—	3	5	19	7	16	79	3	76
Maharashtra	89	7	10	38	30	8	3	10	64	14	89	8	64	26
Mysore	44	11	5	23	15	—	7	12	25	9	49	36	36	17
Orissa	75	25	12	67	—	—	—	17	58	12	83	17	21	71
Rajasthan	100	—	3	18	55	—	6	—	99	39	6	94	63	33
Uttar Pradesh	92	5	—	63	22	—	2	4	84	28	91	5	71	26
West Bengal	100	—	22	64	5	—	7	19	40	11	88	3	74	14

craft work seems to have been interpreted in different ways by different. respondents. Some schools seemed to define internal assessment as the maintenance of records of pupils' progress and external assessment as final examination. Other schools seem to have understood by internal assessment, the assessment carried out by the school staff and by external assessment, the assessment done by an external body. The responses therefore have to be interpreted with caution. Table 20—B gives figures for these. As will be seen from the table a very large number of schools have only internal assessment and a very small percentage of schools have only external assessment. In States of Bihar, Gujarat and Rajasthan a few schools have both external and internal assessment.

The details about the position of examination in crafts can be seen in Table 20—C which reveals that a regular annual examination in craft is held in almost all the schools of Gujarat, Rajasthan and West Bengal In Madhya Pradesh, Maharashtra and Uttar Pradesh more than 80% of schools hold regular examination in craft work. In Bihar, Kerala and Orissa, more than fifty percent of schools hold regular examination in craft work. About sixty percent of schools in Andhra and Madras do not hold any regular examination.

As regards the composition of each examination, in majority of the schools of all States, both theory and practical examinations are held in crafts. In few schools either a practical examination or a theory examination is held. Viva-voce examinations, in which each pupil is interviewed for a few minutes and questions are asked pertaining to craft work, are common in a few schools. Where it is used, the viva-voce examination constitutes only a part of the practical examination.

In all the schools of the States of Gujarat and in more than 50% of schools of the States of Madhya Pradesh, Maharashtra, Orissa, Uttar Pradesh and West Bengal the minimum pass marks in craft work have been prescribed. In more than 60% of the schools of Andhra, Bihar, Kerala, Madras and Rajasthan, minima for a pass in crafts have been prescribed. These minima range from 30% to 50%, approximately 33% in most of the schools. In some schools the minima for theory and practical examinations differ from each other, with the latter being higher.

In more than 60% of the schools of Bihar, Gujarat, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh and West Bengal, the pupil's achievement in crafts is taken into consideration in promoting him to the next class. The pupils' marks in crafts are not taken into consideration for promotion in more than sixty percent of the schools of the States of Andhra, Kerala, Madras and Orissa.

Suggestions

The various steps taken by the different schools for promoting craft work are reported in the section dealing with the separate states. Some special features in craft teaching mentioned by the various schools are also reported there. The schools were also asked to give suggestions for the improvement of craft teaching. These suggestions have been consolidated and classified under some heads. They are given below in Table 21.

TABLE 21

Suggestions for the Improvement of Craft Teaching

Main Heads	Sub-Heads	Total number of schools suggesting it.
Financial	(1) More finance	94
	(2) Better pay-scale	11
	(3) Separate grants for crafts	32
Staff	(1) Whole-time teachers	3
	(2) Adequate Staff	14
	(3) Trained staff	170
	(4) Smaller classes	33
	(5) Attendants	9
Space	(1) More space	101
	(2) Storing facilities	4
	(3) Craft workshop	15
Equipment	(1) Adequate equipment	143
	(2) More furniture	4
	(3) Raw-material	86
Disposal	(1) Central cooperative store for disposal	3
	(2) Produce to go to pupils.	2
Syllabus	(1) Better syllabus	13
	(2) Subjects to be correlated with crafts.	2
	(3) Text-books	4
	(4) Theory of craft	1
Examinations	(1) Better assessment methods	3
	(2) External examination	4
	(3) Supervision by experts	1
Craft Exhibitions.	(1) Craft exhibitions	3
Literature on Craft	(1) Literature on Craft	7
Miscellaneous		
A.	(1) Craft should be optional	11
	(2) Craft should be compulsory	19
	(3) There should be hobby classes	2
B.	(1) Crafts to be upto the 8th class only	1
	(2) Crafts to be continued in the higher classes	1
	(3) Crafts to be continued in colleges.	4

TABLE 21 (*Contd.*)

Main Head	Sub-Heads	Total number of schools suggesting it.
D.	(1) There should be varied crafts	48
	(2) There should be rewards and prizes	1
	(3) Fees should be increased	1
	(4) Competitions should be held.	1
	(5) Preference in Government service.	6
Miscellaneous	(1) More time should be alloted to craft work.	46
	(2) Duration of craft training may be increased from four to six years	1
	(3) One day for craft study for one class in a week	1
E.	(1) Craft should conform to local conditions	1
	(2) Encourage local crafts	1
	(3) Crafts to be started only where facilities exist.	1
	(4) There should not be any craft teacher at all.	2

Disposal of Craft Products

It seems that the usual practice for the disposal of craft products prepared by school students is either to sell them or return them to the pupils. In most cases the products are sold to public. Some schools report that products are sold to pupils and teachers at the cost price. In many cases the products are auctioned. Only some schools in the States of Andhra, Gujarat, Madras, Maharashtra, Orissa, Rajasthan and West Bengal mention that the craft products prepared by the students are preserved in the schools. Schools in Rajasthan mention that these products are used for school purposes. 2 out of 10 schools in West Bengal, which have mentioned that the products are preserved, report that these are used in the schools.

Products are returned to pupils in most of the schools of Maharashtra West Bengal, Uttar Pradesh, Madhya Pradesh and Bihar. Some schools mention that the products are returned because the raw-materials are brought by the pupils themselves. Very few schools in Orissa, Madras and Gujarat have this parctice.

The most common practice seems to be that of auctioning the products, although few schools follow this practice in the States of Bihar, Gujarat, Madhya Pradesh, Maharashtra, Rajasthan and Mysore. In Rajasthan only one school and in Bihar, Gujarat and Madhya Pradesh only two schools have reported this parctice. The States which seem to be following this very often are Kerala, Madras and Andhra. Schools in the States of Gujarat and Andhra generally sell the products to the pupils. Only one school in Uttar Pradesh has reported that the products are sold to the pupils and no schools in West Bengal, Orissa and Mysore have reported such a practice.

From the replies reported by the various schools from the different States it appears that the problem of disposal of craft products is not being dealt with as carefully as it should be. This is substantiated by the suggestions made by some schools for promoting craft work. As will be seen from suggestions some schools have mentioned the desirability of dealing with this problem more systematically.

CHAPTER 5

SECTION A

STATE-WISE ACCOUNT OF CRAFT WORK IN ELEMENTARY SCHOOLS AS REVEALED FROM THE ANALYSIS OF THE ELEMENTARY SYLLABII AND THE PROFORMA SENT TO THE STATES

ANDHRA

Two Syllabii have been studied in respect of this State. One is the Basic school curriculum dealing with classes 1-8 of the Basic schools. The other is the syllabus for the lower secondary stage of instruction (for classes 6-8). In addition, some information about the position of crafts in the schools of Andhra has been supplied by the Educational Research Society, Hyderabad.

In Basic schools craft work is a compulsory part of the programme of studies in all classes and this is utilised as a centre of correlation. The crafts prescribed in the syllabus is the cotton craft but the school is permitted to follow any other craft with the approval of the Department. In addition to cotton, one or more other crafts may be taken up as optional subsidiary crafts. Besides, general science, which is a compulsory subject, includes gardening. According to the Basic school syllabus the average time allotted to craft work is 1½ hours per day in classes 1-3, two hours per day in classes 4-5 and 2½ hours per day in classes 6-8.

From the other syllabus which is for classes 6-8 of traditional type, it appears that three periods per week out of a total of 39 periods per week are allotted to arts and craft. This includes the time given to craft and music in case of girls. It is suggested in the syllabus that craft classes should be held in the last period in the afternoon so that the boys may continue their work after school hours and thus gain more time. The crafts suggested for these classes are :

Book craft and book binding and gardening for class 6 ; book craft and book binding, gardening, wood work and metal work for classes 7-8.

Regarding the time allotted to craft work, it is somewhat surprising that the Educational Research Society, Hyderabad, has reported to us that the time allotted to craft work is one period of 45 minutes per week in classes 1-5 of Basic schools, 40 minutes per week in classes 1-5 of non-Basic primary schools, half an hour daily for classes 1-8 of Basic schools and 45 minutes per week in classes 6-8 of non-Basic schools. In table 5, however, the time prescribed in the syllabus has been given.

As regards the weightage given to the craft work in the grade to grade promotion of children and the mode of conducting examination in crafts work, there is no description in the syllabi. The Basic school curriculum, however, mentions that the teacher is required to keep record of each child's achievement in craft work for each quarter and these records are scrutinised by the inspecting officers.

The Educational Research Society in this matter has reported that craft is not a subject for external examination and craft is not taken into consideration for annual promotion. Records of craft are maintained and internal practical test is conducted in junior Basic, non-Basic primary and senior-Basic schools. In senior-Basic schools, internal examination is conducted in theory as well as in practice of crafts.

Objectives

The syllabii studied do not mention any specific objectives for the teaching of crafts. For Basic schools, general objectives of Basic education as propounded by the Hindustani Talimi Sangh have been summarised. The objectives reported by the Educational Research Society too are not very clear. The objective given is that craft helps the students in earning a living, and preparation for future life.

ASSAM

Hand work is prescribed as a subject for all the classes from 1st to 8th. Some training in a useful hand work such as, spinning, rope making, button making, wood work, bamboo work etc., according to local necessity is to be imparted for all boys from class two upwards. In classes 1-4 usually paper work and rag work, clay work, bamboo work, jute and cloth work are practised. The syllabus suggests that in the lower classes hand work should be done in the spirit of play. Spinning both with Takli and Charkha is to be introduced in almost every school. Each pupil from class 5 upwards is required to select one vocational craft from the following : agriculture, spinning and weaving, metal work, leather work, wood work, lac industry, tailoring and embroidery, printing and dyeing, building together with the making of building materials, such as bricks and tiles. If agriculture is taken up as a vocational craft, any two allied subsidiary industries, such as dairy farming, poultry keeping, bee keeping, seri-culture, pisci culture, preservation of food and vegetables and fruit canning are to be taken up as additional subjects. In girls' schools, for grades one and two, same type of hand work is introduced as for boys. From grade three upwards a graded syllabus for needle work and domestic science is followed :

The number of periods per week allotted for hand work in different classes is as follows :—

Grade 1 — 3 periods out of 30
Grades 2 & 3 — 4 periods out of 34
Grade 4 — 2 periods out of 38
Grade 5 — 2 periods out of 39
Grades 6, 7 & 8 — 3 periods out of 40 (for girls)
— 2 periods out of 39 (for boys)

The syllabus does not give any detail of the weightage given to craft work in the grade to grade promotion of children or about the mode of conducting examination in craft work.

BIHAR

The policy of the State Government is to gradually introduce Basic pattern of education in all the elementary schools. An integrated syllabus has been evolved for elementary stage, craft occupies a compulsory place in the school curriculum. Usually gardening and spinning with its various processes are practised as crafts in primary classes. One of the following crafts may also be practised wherever facilities exist : cardboard work, clay modelling, toy making and pottery, rope making, basket making and mat making, simple weaving on small size loom such as niwar, tape, etc., making of rakhi, jenew, asani, bag, pin cushions etc.

In classes VI and VII pupils are required to select one of the following six main crafts according to their taste, aptitude, according to local conditions and facilities available in the schools : (1) Spinning and weaving ; (2) Gardening and elementary agriculture ; (3) Wood work and bamboo work ; (4) Metal work ; (5) Home craft ; (6) Clay modelling, toy making and pottery. Each pupil is required to take one subsidiary craft also. Those who select spinning and weaving as their main craft have to take gardening as subsidiary craft ; all others have to take spinning as their subsidiary craft. Of the total working hours allotted to craft work roughly three-fourth is to be devoted to the main craft and the rest to the subsidiary craft activities.

Regarding the time devoted to craft, the following information is available in the syllabus :

(a) *During summer months of April and May*

6 hours per week in classes 1-5 and

9 hours per week in classes 6-7

(b) *During the rest of the months*

7 hours per week in classes I, II & III.

7½ hours per week in classes IV and V.

9½ hours per week in classes VI and VII

For those students of classes VI and VII, who take up English as an optional subject the time allotted to craft work is reduced by three hours per week.

Assessment and evaluation of craft work

The progress record card given in the syllabus shows that 400 marks out of a total of 1,000 marks are assigned for craft work—300 for main craft and 100 for subsidiary craft. For those students of classes VI and VII who take up English which is an optional subject, marks for craft work are reduced to 300—200 for main craft and 100 for subsidiary craft. The pupils are required to appear in an attainment intensive test in theory of craft work carrying fifty marks. The overall percentage of pass marks in craft is 50. In addition, children are required to keep records of craft work which are examined by the assessment board which visits the schools. These records are taken into consideration. In the total assessment for craft work, the following extract from the syllabus may also be found relevant here:

"The Assessment Board of different levels visiting a school will watch it at work, observe the pupils engaged in varied activities of safai, *crafts*, study, debates, physical demonstrations, including scouting and cubbing and hold discussions with the pupils and teachers individually and collectively. They will examine the records of the pupils relating to craft work, their diaries and notes on correlational subjects and also hold discussions with the pupils, with a view to find out if, what had been written in them had been done really with self-effort and intelligent apprehension and appreciation of the contents. The Board will hold conference with the teaching staff and immediate controlling officers and discuss the ways and means for their solution."

The following suggestions given in the syllabus in connection with craft work may also be found useful :—

(a) Wherever possible, trained hereditary craftsmen may be employed. Whenever this is not possible, the school staff should try to secure the services of hereditary local craftsmen for training and giving demonstration to the pupils.

(b) During the practice of craft in school hours care should be taken to see that the pupils not only learn technique of the craft but also acquire necessary knowledge regarding the source, production and procurement of raw materials, tools and equipment, etc.

(c) In classes VI and VII, the pupils should be encouraged to take up specific purposeful projects relating to various crafts. For example, in wood work, the project may be maintenance and repair of the school furniture, supply of wooden foot-wear to neighbouring villages, etc. Different groups of pupils may take up different projects. The proper planning, execution and subsequent review of such projects will provide the necessary experience to the pupils to appreciate the purposefulness of craft activities.

Objectives

(a) To create vocational bias, to stimulate initiative and to foster a sense of dignity of labour;

(b) To equip the pupil with such reasonable skill as to enable him to produce useful articles to meet the basic requirements for his life as well as for his school community;

(c) To offer opportunities for acquiring correlated knowledge in different subjects.

Note : While keeping the above objectives in view, efforts should be made to ensure that the craft work is also economically productive. Economic productivity is a good test of the efficiency of craft work and efficient craft work is important if it is to be educationally useful.

GUJARAT

Craft is a compulsory subject in Basic schools as well as in classes I to IV of the non-Basic schools. It is reported that the non-Basic middle schools in old Bombay State are not Government ones and no information is given for these.

Crafts followed

In Junior Basic schools the crafts of spinning and weaving, kitchen gardening and agriculture, card-board modelling and wood work are practised. In non-Basic primary schools simple craft work is practised in clay work, kitchen gardening, spinning, card board modelling, bamboo work, paper work, articles from waste, paper-pulp work, cane work, mat work, basket work. In the senior Basic schools crafts of spinning, weaving, kitchen gardening and agriculture, card-board modelling and wood work, needle work and emboridery, tailoring, bamboo work and card-board modelling and book binding are practised. In each of these schools one of the above crafts of local importance is practised. Crafts in rural and urban areas as well as for boys and girls are the same.

Time devoted for craft work per week

The time devoted to craft work is 10 periods (each of 35 minutes) in junior-Basic classes, about five periods in non-Basic primary classes, 10 periods in senior Basic classes and 4-5 periods in non-Basic middle classes.

Examination in crafts

Craft is an examination subject in the Basic schools only and it is assigned 35% of the total marks. Out of a total of 100 marks for craft work 40 marks are assigned for general work, 40 marks for practical work and 20 marks for theory.

Objectives

The objectives of introducing crafts in Basic schools have been reported as follows :

(1) To give necessary training in craft, to be self-sufficient individually or collectively in the matter of fundamental needs of a human being.

(2) To give opportunity to children.

Craft in these schools is taught as a medium of instruction. Nothing is reported in this respect about the non-Basic schools.

JAMMU AND KASHMIR

The contents of the syllabus do not mention about any craft work in the classes I to VIII.

KERALA

With the orientation of the syllabus towards the Basic pattern, practice of some useful crafts forms a compulsory part of the school work at this stage.

Crafts followed

At the primary stage i.e. in classes I to IV any one or two of the following crafts may be chosen by each school depending upon the availability of raw materials and skilled hands to assist their practice—cotton craft, gardening, coir work, basketry, mat weaving, paper folding and card-board work, clay modelling, needle work. The crafts suggested for classes VI and VII are—cotton craft, gardening and agriculture, coir work, wood work, card board work and book binding, leather work, pottery, rattan work, needlework, and embroidery tailoring.

Time devoted to craft work per week

Five periods out of a total of 35 periods.

Objectives

The aim of introducing craft in classes I to IV is mainly to develop the dexterity of fingers of the children and their powers of observation and creative imagination. In classes V, VI and VII more attention is paid to tidiness and finish of the products.

MADHYA PRADESH

The syllabii for primary classes I to V as well as for VI to VIII have been reported to be based on the craft centred syllabus of the Hindustani Talimi Sangh.

Crafts followed

In classes I to V each student is to practise one main and one subsidiary craft. The main craft is spinning while the subsidiary craft may be any one of the following : Gardening, clay work and toy making, paper work and card-board work, bamboo work. The integrated syllabus emphasises the important place given to craft work in classes VI to VIII. Craft activities along with other activities form the part of the curriculum but it is not clear whether craft forms a compulsory subject to be studied by each pupil in all schools. Craft activities have been listed along with other optional subjects and activities, out of which each pupil is required to select any three. Those students who offer crafts can select one of the following—spinning and weaving, gardening, wood work, needle and embroidery work, leather work.

Time devoted to craft work

In primary classes 6 hours are devoted to the practice of main craft. The information about other classes is not available in the syllabus.

MADRAS

In the curriculum for integrated elementary course of this State, handicrafts occupy a compulsory place.

Crafts followed

Each student of classes I to V is required to take up two out of the 4 crafts—spinning and weaving, paper work and card-board modelling, gardening, clay modelling. Besides these, certain minor handicrafts, for example, stringing beads and flowers, preparation of decorated materials with paper leaves or flowers, etc., may also be taught where such facilities are available. In classes VI and VII any one of the following crafts may be chosen : gardening spinning and weaving, wood work, home craft, including needle craft, metal work.

Time devoted to craft work per week

Time devoted to craft work per week is 5 periods out of a total of 35 periods in classes I to V and 4 periods out of a total of 35 periods per week in classes VI and VII. The time mentioned here for classes VI and VII is also used for drawing and music, etc.

Assessment of craft work

No external examination is held in craft work. Some records of pupils' progress in craft work are maintained in all the schools—whether Basic or non-Basic. In Basic schools, however, an internal examination in craft work is also conducted. It is not known what percentage of the total marks are allotted to internal examination in craft work. Of the marks assigned to craft work, 80% are allotted to the practical work and 20% to theory.

Objective of introducing crafts

The objective of the syllabus for handicrafts in classes I to V is to give children of these standards opportunity to practise the crafts of simple nature according to their capacity and to produce simple articles of utility as well as beauty. Handicrafts provide for the children an opportunity not only for productive work by developing skills of various kinds but also for creative self-expression in handling raw-materials of various kinds and transforming them into things of beautiful form and shape. The objective of arts and crafts in the classes VI and VII is to give all pupils scope for self-expression through drawing, painting and allied crafts and to help them to carry out their ideas by means of simple arts and crafts which can be fairly easily learnt and carried out by secondary school pupils thereby giving them training in creative and manual dexterity also.

MAHARASHTRA

Crafts are taught in each of the classes I to VIII. It is compulsory in Basic schools but optional in non-Basic schools.

Crafts followed

In junior Basic schools spinning, card-board and kitchen gardening are followed. In non-Basic primary schools simple craft work in clay or paper work is practised. In senior Basic schools one of the three crafts viz., weaving, agriculture, wood work, is followed. In non-Basic classes V to VII, the crafts practised are bamboo work, cane work, paper pulp, kitchen gardening, needle work.

Time devoted to craft work per week

Basic schools—10 periods of (40 minutes each)
Non-Basic schools—6 periods. **Assessment in craft work**

Craft is an examination subject in Basic schools only and 100 marks are assigned for it. There is external as well as internal examination in craft work. The record for the craft work during the year is also taken into account at the time of annual examination.

Objectives

(1) It is a medium of instruction ;
(2) It trains mind and body ;
(3) It developes good qualities such as cooperation, sportsmanship;
(4) It brings all-sided development of the child.

MYSORE

In the integrated primary school course of seven years in this State a basic craft has been prescribed in the curriculum and some time is allotted in each class for arts, crafts and common activities. It appears, however, that craft work as yet does not form a compulsory subject in all classes of schools other than full Basic schools, because it is mentioned in the syllabus that in schools other than full Basic schools, in lieu of craft work, arts and common activities will be carried on with greater emphasis.

Crafts followed

In standard I of Basic schools, children do practical work, in paper, kitchen gardening, spinning and mat weaving. This is common for the non-Basic schools also. In non-Basic schools, however, playing of takli may be omitted and more of gardening and clay work may be done. In standards 2-4 of Basic schools pupils are required to do work in any two of the following three crafts : spinning, kitchen gardening, paper and card-board work. If land and water facilities are available kitchen gardening is compulsory. In standards 5-7, pupils do work in any one of the following three crafts : agriculture, spinning and weaving and wood work. Girls may do practical work in domestic science or home craft as craft work. In schools where facilities are available one of the following crafts may be studied instead of the above crafts : Tailoring, rattan work, toy making, chalk piece making, coir making, bee keeping, soap making and dyeing and printing.

Time devoted to craft work per week

The time devoted to craft work is as follows :

6½ hours out of a total of 27½ hours per week in standards 1-2.

8 hours out of a total of 30 hours per week in standards 3-4.

9 periods (each of 40 minutes) per week in standard 5.

8 periods per week in standard 6-7.

ORISSA

In classes 1-5 of this State, gardening, spinning and hand work (including needle work for girls) form a compulsory part of the school work. In class I there is no spinning. Craft work is compulsory in classes 6-7. In a latest communication received from D.P.I., Orissa, it has been reported that craft is being gradually introduced in all middle classes including middle English schools, but since teachers are not readily available for all the schools, craft—teaching has been made only an optional subject in such schools. In classes 6-7, the following crafts have been suggested : Tailoring, sewing, needle and embriodery work (for girls), toy making, basketry and coir work, clay work and pottery, wood work, spinning and weaving, cane work, clay modelling and papier mache.

Time devoted to craft work

Time devoted to craft work is as follows :

Class I	—	2 periods out of a total of 24 periods per week.
Classes 2-3	—	6 periods per week.
Classes 6-7	—	100 hours in a year.

Assessment in craft work :

There is no written examination in classes 1-3. In lower primary examination, 20 marks out of a total of 300 are allotted to craft work. In classes 6-7, 50 marks out of a total of 750 marks are allotted to crafts. The syllabus reveals that 7% of the total examination marks are devoted to written examination in crafts in lower primary classes. It is not clear, however, whether any practical examination is given and if so, how many marks are allotted to it. In classes 6-7 out of the total of 50 marks, 20 marks are assigned for the whole year's records of craft work and 30 marks are kept for the practical and oral test.

PUNJAB

Agriculture or spinning and weaving as a basic craft is a compulsory subject in the junior Basic schools. In primary non-Basic schools in lieu of craft work, the time is utilised in various activities including in part some craft work. In senior Basic schools also craft is compulsory. In the syllabus for classes 6-8 of middle non-Basic schools there is a compulsory subject known as Practical arts. This includes agriculture, with special reference to soil conservation measures, or domestic science (for girls) or some other crafts such as spinning and weaving or wool work as suited to the district and locality. In addition to this compulsory subject, two more crafts can be chosen as elective papers also.

Time devoted to craft work

Junior Basic schools	— 1 hour per day in classes 1-2.
	— 1½ hours in classes 3-5.
Non-Basic middle schools	— 4 periods per week.

RAJASTHAN

An integrated syllabus has been prescribed for all the primary classes of this State. According to this syllabus craft forms a compulsory programme in classes 1-5. Regarding classes 6-8, two time tables are given in the syllabus : One time-table is with crafts and the other is the time-table without crafts. This indicates that craft work probably is not compulsory in classes 6-8 of every school.

Crafts followed :

At the primary stage each student is required to practise two crafts out of the following lists : spinning, gardening, clay work, cardboard and bamboo work. In classes 6-7 each student is required to take two crafts from the following : Agriculture, spinning and weaving, clay work and pulp work, wood work, leather work and metal work, home science and tailoring.

Time devoted to craft work :

In classes 1-5 two hours out of a total of 6½ school hours per day are devoted to craft work. In classes 6-7, 12 hours out of the total of 40 hours per week are devoted to craft work.

UTTAR PRADESH

It is reported by the Directorate of Education that all the elementary schools in the State—primary and middle are Basic schools and hence craft is a compulsory subject.

Crafts followed :

The crafts followed in junior Basic schools are : Elementary agriculture, gardening and allied art, spinning, some local crafts such as clay work and allied crafts, sewing and elementary embroidery and allied arts (for girls). In the senior Basic schools agriculture is followed in the rural schools. In other schools where land for agriculture is not available (such as in urban schools), one of the following crafts may be followed :—

1. Spinning and weaving and allied art
2. Wood craft and allied art
3. Book craft and allied art
4. Metal craft and allied art
5. Leather craft and allied art
6. Tailoring and allied art
7. House craft and allied art
   (for girls only).

Time devoted to craft work :

In junior as well as senior Basic schools 12 periods per week are devoted to craft work—8 periods for practicals and 4 periods for theory.

Assessment in Crafts :

Craft is an examination subject but the examination is purely internal. Craft is treated as equivalent to one subject and is assigned 16% of the total marks. Records are maintained at all stages. But these are not generally taken into consideration in the annual assessment of the students.

Objectives :

It is reported that the objective of the teaching of crafts is the same as laid down for Basic education. The teaching of craft is related to the teaching of other subjects of the curriculum as far as possible.

In the junior and senior Basic schools crafts form a compulsory subject. In non-Basic primary schools crafts are just being introduced. Some details of the creative activities and craft work practised in the various grades are mentioned below :—

Grades I-II

(1) *Creative and imaginative play*—Just like making a house, doll play, making some of articles out of match boxes, preparing furniture for doll house, post office, shop and shop-keeper play etc.

2. Paper work, cutting papers of different designs and shapes.

3. Preparing different designs of painting by chalk colours.

4. Clay modelling—to prepare clays for modelling purposes.

5. Fibre craft.

6. Doll craft, etc.

The articles prepared from these are mostly for play purposes of children.

Grade III

Individual and group work :

1. To prepare play things out of waste craft and clay, small pieces of wood, bamboo, paper pulp, card-board, etc.

2. Clay work, earthen pots, plates, bowls and other articles.

3. Paper work, invitation cards, book covers, calendars, etc.

4. Leaf and bamboo work, plate fans and brooms.

Grades IV-V

Continuation of clay work, paper work, leaf and bamboo work and coir work.

In classes 6-8 of senior Basic schools also crafts are compulsory. The crafts followed are needle work for girls, carpentry, agriculture, metal work, spinning and weaving, card board work, book binding, basketry, clay work. In towns carpentry, card board and metal work are mainly practised.

Time devoted to craft work :

The time devoted to craft work has been reported as 4½ hours per week in junior Basic schools, two hours per week in non-Basic primary schools and eight hours per week in senior Basic schools.

Assessment in Craft work :

The crafts are examination subjects in the Basic schools only. In junior Basic schools this is assigned 20% of marks while in senior Basic schools 30% marks are assigned to it. There is no external examination. Records of craft work are kept and they are assigned 50% of the total marks assigned for craft. The remaining 50% of marks are for formal internal examination in theory and practice.

DELHI

Crafts form a compulsory subject in Basic schools. From the integrated syllabus, however, it is not clear whether they are compulsory in non-Basic schools also. The crafts usually practised in the Basic schools are : (i) Spinning and weaving (weaving starts from class 3) ; (ii) clay work and pottery ; (iii) gardening and agriculture ; (iv) card-board work and book craft.

Time devoted to craft work per week :

In classes 1-2	:	6 hours per week
In classes 3-4	:	4½ hours per week
In class 5	:	5½ hours per week.

HIMACHAL PRADESH

Craft is a compulsory subject to be taught in all elementary schools—primary as well as middle. For Primary classes following crafts are prescribed : Wool spinning, wool weaving, spinning and weaving of cotton and agriculture. For middle classes i.e. classes 6-8, crafts recommended are as follows : agriculture, home science, spinning and weaving, wood work, dairy farming, poultry keeping, seri-culture, bee-keeping, tailoring, preservation of vegetables and fruits.

Time devoted to craft :

Time devoted to craft work is one hour per day in classes 1-3. For other classes the data is not available.

Assessment in craft work :

No formal examination is held in craft work.

SECTION B

STATE REPORTS PREPARED FROM THE ANALYSIS OF THE RESPONSES FROM SECONDARY SCHOOLS

ANDHRA PRADESH

Crafts

Craft is a compulsory subject in the secondary schools of Andhra Pradesh. Five schools have, however, mentioned that they teach craft as an optional subject. A few schools mention that it is both a compulsory and an optional subject. Generally the craft is taught in classes 6 to 11. In some schools craft is introduced in classes 9 to 11 or 12. A few schools start craft in the 5th class. Some schools have craft only in classes 6 to 8.

Objectives

The most accepted objectives in the teaching of crafts appear to be providing occupational outlet to pupils and inculcating dignity of labour. These have been endorsed by 58 schools. The next accepted objectives seem to be exploring the aptitudes, and interests of pupils and contributing to their leisure time activity. These are endorsed by 56 and 55 schools respectively. The least accepted objective appears to be that of offering an opportunity for guided explorat ion in practical situation endorsed by 27 schools. The schools differ in their opinion about the fulfilment of the objectives. On the whole they do not seem to be satisfied.

Crafts taught

The most popular craft in the State appears to be weaving. This is followed by wood work and book-binding. Then come gardening and spinning. The statement of number of schools foll wing different crafts appears in the tabular form at the end of the main report. Table No. 22

As will be seen there are no special differences in the crafts followed in the three types of secondary schools—high, higher secondary and multi-purpose. Metal craft, however, is followed in multi-purpose schools only. Sewing, doll-making, embroidery, home craft and pottery are mentioned as being followed in the girls schools.

All the schools seem to offer only one craft to a student at one time. However, there are eleven schools which offer two crafts and a few schools offer three crafts. Only 34 schools mention that it is not possible for the student to change craft in the secondary stage. Most of these schools mention that it is possible for the students to change craft in the secondary school stage. Most of these schools mention that the change is possible in the 9th class.

The main reason for the choice of a craft by a student is that the craft is provided by the school. This is mentioned by 65 schools. Only 27 schools mention that the craft is chosen by the student on the aasis of his aptitude. The other reasons viz., parents' choice and teacher's choice and craft being hereditary in the family are mentioned by 12, 16 and 18 schools respectively.

Evaluation

More than half of the schools do not hold any examinations in crafts. Out of 78 schools that have answered the questions on evaluation, 45 schools report that they do not hold any examinations. 44 schools have mentioned that they keep assessment record of pupils. 43 schools assess the quantitative turnover while 35 schools assess both the creative ability and technical competence of pupils.

In almost all the classes assessment is internal. Those schools which hold examinations, hold it mostly three times in a year. Only a few schools have viva-voce examination and most of the schools have both theoretical and practical examinations. The time devoted to theoretical paper ranges from ½ an hour to 3 hours and marks from 25 to 100 (mostly the schools have papers of 100 marks each). Practical examination also carried 100 marks, the time ranging from 45 minutes to 3 hours. Most of the schools (67) do not take craft marks into consideration for promotional purposes. The minimum pass marks range from 25 to 60%, in most cases this being 35%.

Suggestions etc. :

Special features:

The following special features have been mentioned by some schools :

1. Holding the craft exhibition
2. Practising correlation of craft with other subjects
3. Making furniture required by the schools in the craft classes.

Suggestions :

The following suggestions have been offered by the various schools with a view to promoting craft instructions in the schools. The number within brackets after each suggestion indicate the number of schools offering that suggestion:

1. Adequate accommodation should be provided. (20)
2. Neccssary craft equipment should be made available. (21)
3. Trained and qualified staff should be provided. (16)
4. Recurring and non-recurring grants should be given in time. (10)
5. Crafts should be made an examination subject. (10)
6. Craft should be made compulsory. (5)
7. More time should be devoted to crafts. (6)
8. Variety of crafts should be introduced in schools. (4)
9. Text-books and journals should be provided. (3)
10. The central cooperative store should be set up for the disposing of craft articles. (3)

The replies giving information about the time devoted by a class to craft work are not quite clear. The time mentioned ranges from 1½ hour to 33 hours. Apparently some schools have interpreted it as time devoted per week by all the classes. On the whole it appears that the trend is to devote 1½ hour to craft work. Usually the craft period is of the duration of 45 minutes. Some schools have the period of 40 minutes duration also.

Curriculum

Almost all the schools (76) mention that the content of the craft curriculum includes application of the craft in daily life. A large number of schools (66) are of the opinion that it contains material dealing with manipulative skill. 54 and 50 schools respectively feel that the craft curriculum contains material bearing on the study of the economics of the craft and of the scientific basis of the craft.

A large number of schools (65 & 64) feel that the curriculum is integrated with home and community experience and with co-curricular activities, 49 schools have expressed the opinion that the craft curriculum is integrated with other subject areas. Quite a large number of schools (73) are of the opinion that the curriculum stresses the creative aspect of the craft.

60 schools have mentioned that the curriculum is stimulating for the pupils and it motivates and prepares them for pursuing craft even after secondary school. However, only 25 schools conduct field trips to places that are of interest from the point of view of craft education.

Physical facilities

Accommodation:

Replies given to the question about the size of the class-room are not clear. Some schools have given figures which indicate the size of the room while some other schools have given the size of enrolment in a class-room. The size of the craft room ranges from 150 sq. ft. to 1000 sq.ft. The usual craft room appears to be in the neighbourhood of 500 sq. ft. The size of enrolment in a classroom ranges from 20 to 55.

A little more than half of the schools seem to be satisfied with the size of the craft class.

61 schools have given the information that they have a separate room set apart for purposes of craft classes. Only about half of these feel that the room provides adequate space, although a much larger number of the opinions is that the room is well lighted and suitable in other ways.

46 schools have adequate facilities available for storing craft articles completed by pupils and other material and supplies.

Equipment

As far as the working facilities in the form of various material are concerned most of the schools (60) seem to be satisfied with raw-materials available and quite a large number of schools (56) are satisfied with tools. The schools seem to be much less satisfied as regards work benches (37). Schools mention that they have tables (36), easels (25) and show-cases and display boards (22). However, most of the schools (74) are of the opinion that the material supplied to them is being used quite efficiently. Quite a large number of schools (68) make raw materials available to pupils in time.

It appears that in most of the schools craft work is done in groups, although individual work is also included. Only 16 schools mention that each student is provided with his own set of tools. In many cases a student shares tools with 6 to 3 other students.

A large number of schools (51) mention that they possess cfrat models and charts for teaching purposes. With regard to other instructional materials the schools do not seem to be quite satisfied. Only 15 schools mention that they have periodicals available to them.

Disposal

The most popular method of disposing of craft products prepared by students is by sale. Only 60 schools have given some reply to the mode of disposal. Of these 23 schools mention that they auction the craft products. 16 schools sell them to the public while 3 schools sell them to pupils and the staff. 13 schools mention that the craft products are returned to pupils. 5 schools, however, preserve these products in their own rooms.

Teachers

From the information given by the schools it appears that in most schools one teacher teaches two crafts. In some cases the schools mention that there is only 1/3 teacher for each craft. Some schools have one teacher for each craft. While a few schools have two teachers.

43 schools are of the opinion that the staff provided for the various crafts is adequate. Almost all the schools (71) mention that the teachers have received instructional training. But 49 and 51 schools respectively mention that they experience difficulty in securing craft teachers who know their subjects satisfactorily and who are pedagogically trained. Only a few schools (9) employ untrained and unqualified artisans for the teaching of crafts.

It is not clear what qualifications are prescribed by the State for the craft teachers. From the information given by some schools, it appears that the teachers teaching craft have passed S. S. L. C. examination. Some schools employ non-high school or non-S. S. L. C. teachers also. Most of the schools mention that they insist on 8th grade or school final examination with diploma in crafts.

The following institutions have been mentioned by various schools as offering training facilities for craft teachers :

1. Junior Technical Schools at Sikandarabad, Nallapalli,
2. Government Technical Schools at Naredpalli. Hyderabad, Mashirabad, Rajahmundhari.
3. College of Fine Arts, Hyderebad.
4, Allauddin Technical School.
5. Khadi Neul Muslieen, Kachiguda.
6. Government Polytechnics, Department of Technical Education, Vocational Institute, Ramganj.
7. Markasi Madursa.
8. Weaving Institute.
9. Industrial School, Nellor.
10. Vivek Vardhani Training College of Tailoring, Hyderabad.
11. Ambar Charkha Training Centres, Hyderabad.
12. Village Industries Centre, Hyderabad.

13. Khadi Gram Udyog, Hyderabad.

and Multipurpose schools, Teachers colleges, Teachers training schools, Home Science College.

Most of the schools give salary to the craft teachers in the grade of 45-100-120. There are various other grades also. However, 61 schools have mentioned this grade. The other grades range from 30-45-100-280.

49 schools have mentioned that the craft teachers are acquainted with modern practices in craft teaching. However, only 23 schools mention that the craft teachers participate in community craft activities.

TABLE 22

Crafts followed in the Secondary Schools of Andhra Pradesh

	High Schools			Higher Secondary			Multipurpose			
	Boys	Girls	Co-ed.	Boys	Girls	Co-ed.	Boys	Girls	Co-ed.	Total
Spinning	6	2	8	—	1	2	3	—	1	23
Weaving	76	1	25	1	1	2	3	—	2	111
Wood-work	18	1	14	2	—	4	15	—	1	54
Cardboard work	1	—	1	—	—	—	—	1	—	4
Paper work	4	2	1	1	—	2	3	1	—	14
Leather work	3	—	2	1	—	1	3	2	—	12
Fibre craft	2	1	—	—	—	—	—	—	—	3
Book-binding	12	—	6	—	—	3	10	—	—	31
Tailoring	2	1	1	—	1	3	2	2	1	13
	1	—	—	—	—	1	1	—	—	3
Sewing	—	2	2	—	2	—	—	—	—	6
Tap making	2	—	3	—	1	1	—	—	—	7
Drawing	2	4	2	1	1	—	1	—	—	11
Doll making	—	1	—	—	—	—	—	—	—	1
Clay modelling	2	—	2	1	—	1	—	—	—	6
Embroidery (needle work)	—	9	1	—	2	1	—	2	—	15
Gardening	1	17	1	—	2	3	1	—	—	25
Agriculture	1	—	12	1	—	1	—	—	1	16
Home craft	—	5	—	—	3	2	—	2	—	12
Technical sub.	—	—	—	1	—	—	—	—	—	1
Metal craft	—	—	—	—	—	—	2	—	—	2
Genl. Engineering	—	—	—	1	—	—	—	—	—	1
Pottery	—	1	—	—	—	—	—	—	—	1
Music	—	—	—	—	1	—	—	—	—	1
Printing	—	—	—	—	—	—	1	—	—	1

Crafts

Craft is compulsory subject in the secondary schools of Bihar. Only 3 multi-purpose schools have reported that it is an optional subject in these schools. Generally craft is introduced in grades 6 to 11. In some schools craft is taught in grades 8 to 11, in some in grades 6 to 9. There are a few schools which have other variations like 6 and 7, 9 to 11 and 6 to 10.

Objectives

The most accepted objectives seem to be that of inculcating dignity of labour which is endorsed by most of the schools (46). The other highly accepted objectives are that craft enables pupils to gain manipulative skill, that it makes pupils appreciative of craft products, that it helps them in the use of inexpensive and locally available material and that it provides vocational outlet. The least acceptable objective seems to be providing an opportunity for guided exploration in practical situaations. The objectives of providing specialised experience and making them well-equipped for house-hold repairs are also less acceptable.

It is not clear whether the schools are satisfied with the achievement of the objectives, although many schools mention that the objectives are being satisfactorily achieved.

Crafs taught

The most popular crafts in the secondary schools of Bihar seem to be spinning and kitchen-gardening. These are equally popular in the boys and mixed schools, though kitchen-gardening is not practised in the girls schools. Gardening seems to be the next in popularity. The list of the crafts and the number of schools providing for these appears at the end of the report (Table No. 23). As will be seen paper work and drawing (if drawing can be called a craft !) are found only in multipurpose schools. As is evident, embroidery is taught in the girls' schools. There does not seem to be any special difference in the crafts offered in the boys and girls or in the three types of secondary schools.

The schools mostly provide only one craft at a time to the students. There are only 5 schools mentioning that a student can offer two crafts and only one school has the possibility of offering more crafts. A student learns craft from 2 to 6 years. In most schools this period is 4 years.

The main basis of the selection of a craft by a pupil is its provision in the school. The majority of schools have mentioned this quite frankly. Some schools (15) mention that the hereditary occupation is an important factor while some others (13) mention pupils' aptitude as being the determining factor. 11 schools have communicated that the parents choice and teacher's choice are important in this respect.

About half of the schools mention that it is possible to change crafts. In most cases the student has a choice to change in the 10th grade while some schools have 7th and 9th grades being the grades in which a change can be made.

Replies to the question as to how many hours are devoted to craft teaching are very vague as some schools seem to have mentioned total number of hours for the various classes. The general practice appears to be to devote about 1½ hours to 3 hours or 4 hours per week to craft teaching. The usual duration of a period is 40 or 45 minutes. Majority of the schools seem to be satisfied with the length of the period provided for craft work.

Curriculum

38 out of 50 schools indicate that the content of the craft curriculum has relation to the application of craft in daily life. 31 schools mention that the craft curriculum includes manipulative skill items and 27 feel that it includes study of the economics of the craft and of the scienitfic basis of the craft.

The majority (37) of the schools are satisfied with the integration of the craft curriculum with home and community experiences and with co-curricular activities (51). Only 17 schools, however, indicate that it is integrated with other subject areas in the programmes of study.

The majority of schools are of the opinion that the craft curriculum stresses the creative aspects of craft and about half of them indicate that it stimulates interest in the pupils to prepare them for craft pursuits beyond the secondary school.

Only a few schools (6) organise field trips to places of interest from the stand point of craft education.

Physical Facilities

Accommodation

The size of the craft room seems to vary from 150 sq. ft. to 400 sq. ft. The usual pattern being 360 sq. ft. About half of the schools are of the opinion that it is adequate for the nature of work to be done.

Only a few (10) schools have the provision of separate room for the teaching of crafts. Usually the schools seem to be satisfied with the space available and about half of the schools feel that the room is well-lighted and otherwise suitable for the purpose.

Only some schools (18) have adequate storage facilities for keeping craft products prepared by students and other supplied.

Equipment

A little more than half of the schools indicate that adequate raw-material is made available to the schools and little less than half are satisfied with the tools available in the schools. Very few schools indicate that they have adequate working tables or work benches or easils or show-cases or displayboards. Most of the schools, however, feel that the material and equipment supplied to them are being efficiently used. Most of the schools also indicate that raw-material is supplied to the students in time.

In most of the schools, students work in groups. Some schools have mentioned that they work both in groups as well as individually. About half of the schools mention that each student is provided with his own set of tools and in the schools in which he has to share tools, the number with whom he has to share varies from 4 to 20, the usual pattern being 4 and 8.

Only a few (8) schools keep the workshop open outside school hours. There is no specific answer to the question how many students utilise the provision of the opening of workshop after school hours.

Of the instructional materials provided for craft instruction, a little less than half of the schools seem to have text-books for this purpose. Only 13 schools have teachers' file of materials' or pupils' collection of craft designs and material. Less schools have reference material or craft models and charts. A few schools have periodicals available for this purpose.

Disposal

About half of the schools dispose of craft products by selling them in the market. 14 schools report that the craft products are returned to pupils and 8 schools sell them to staff and students. Only 2 schools mention that the disposal is made by auctioning.

Teachers

Mostly schools have one teacher for one craft but in some cases one teacher is teaching two crafts and there are 3 schools which do not have any teacher at all. Some schools have 2 teachers and some even three teachers. 28 schools, however, feel that they have adequate staff for the crafts.

More than half of the schools indicate that the teachers have received instructional training in crafts. However, more than half of the schools mention that they have experienced difficluty in securing craft teachers who know their subjects satisfactorily and those who are pedagogically trained. Only few schools employ untrained and unqualified artisans for the teaching of crafts.

Information is not clearly indicative regarding the qualification of the teachers. There seem to be 2 or 3 patterns having Matric and Basic trained teachers, having intermediate pass teachers and having Graduate teachers with diploma in Crafts.

The following institutions have been mentioned as providing training for craft teachers :—

(1) Basic Training Schools ;
(2) Sarvodaya Training Centre ;
(3) Teachers Training Colleges.

The pay scales are not clearly indicated. There seems to be these patterns 40-60 ; 50-90 ; 70-100 ; 120-300. It is not clear from the attached sheet what the usual salary pattern is in the State.

Less than half of the schools mention that craft teachers are acquainted with modern practices and more than half of the schools indicate that the craft teachers participate in community craft activities.

Evaluation

Almost all the schools maintain records of progress of pupils and more than half of the schools evaluate creative ability and quantitative turn-over by the pupils. Less than half of the institutions evaluate technical competence of the pupils.

Most of the schools use internal assessment and some schools use both internal and external assessment. In most of the schools examinations are held usually twice a year. There are some schools (12) which have no examination in crafts. The pattern of examination is not clear from the replies. Only (11) schools have examinations in theory and 16 in practical, while 9 schools mention that they hold examinations both in theory and practical. The theory paper is usually for 2 to 3 hours duration carrying marks ranging from 40 to 100. The practicals are for half an hour to three hours and the range of marks is from 20 to 100. Only 5 schools have provision for *viva voce* examination.

Most of the schools (36) mention that marks in crafts are considered towards promotion of the students to the next grade. The minimum percentage of pass marks ranges from 30 to 40.

Suggestions, etc.

Special features

There are only two special features mentioned by two schools :

(a) All the teachers take part in gardening ;

(b) Provision of bamboo work.

Promoting craft work

The following steps have been reported by the different schools to promote craft work in their respective institutions :—

(a) Organising speeches on crafts ;

(b) Organising exhibitions ;

(c) Distributing fruits and flowers produced in the garden.

(d) Provision of prizes and competition ;

(e) Encouraging teachers to participate in craft activities ;

(f) Seeking help from agricultural supervisor.

Suggestions

The following suggestions have been given by different schools :— Number in the brackets indicate the frequency of suggestions given :

(a) Recurring and non-recurring funds should be provided (18)

(b) Trained crafts teachers should be provided (16)

(c) Adequate equipment and materials should be provided (15)

(d) Adequate accommodation should be provided (9)

(e) Whole-time craft teachers should be employed (3)

(f) Craft should be at par with other subjects of the curriculum (2)

(g) A number of crafts should be introduced (2)

(h) Craft teachers should be given better pay scales (2)

TABLE 23

Crafts Practised in the Secondary Schools of Bihar

B=Boys G=Girls C=Educational

Craft Practised	High School			Hr. Sec. School			Multi-purpose			Total
	B	G	C	B	G	C	B	G	C	
Spinning	8	2	7	—	—	5	2	—	1	25
Soap making	1	—	—	—	—	—	—	—	—	1
Kitchen gardening	9	—	8	2	—	2	—	—	2	23
Gardening	3	2	2	—	—	3	1	—	—	11
Agriculture	1	—	1	—	—	1	1	—	1	5
Printing	1	—	—	—	—	—	—	—	—	1
Embroidery (Needlework)	—	2	1	—	—	—	—	—	—	3
Fibre craft	—	—	—	—	—	1	—	—	—	1
Technical subject	—	—	—	—	—	—	—	—	2	2
Metal craft	—	—	—	—	—	1	—	—	2	3
Sewing	—	—	—	—	—	—	—	1	—	1
General engineering	—	—	—	—	—	—	—	—	2	2
Drawing	—	—	—	—	—	—	1	—	1	2
Tailoring	1	1	1	—	—	2	1	—	—	6
Wood work (Carpentry)	—	—	1	—	—	—	2	—	2	5
Clay work	—	—	—	—	—	1	—	—	—	1
Home crafts	1	1	—	—	—	—	—	—	—	2
Bee keeping	1	—	—	—	—	—	—	—	—	1
Card board work	1	—	—	—	—	—	—	—	—	1
Weaving	—	1	—	—	—	—	1	—	—	2
Leather work	—	1	—	—	—	1	1	—	—	3
Paper work	—	—	—	—	—	—	1	—	—	1

GUJARAT

Crafts

All the schools which have replied to the questionnaire from Gujarat State are high schools except six multi-purpose schools. All these schools teach craft as a compulsory subject. There is only one school which mentions that craft is an optional subject. In all schools crafts are taught from 5th to 7th classes. In two schools it is mentioned that the craft is taught in classes 6 to 9, in one school from 6 to 8 and in 2 schools from 6 to 10.

Objectives

The most accepted objective of craft teaching in the schools of Gujarat seems to be that of inculcating dignity of labour through craft. 38 out of 50 schools have endorsed this objective. The next popular objective is of the significance of craft in contributing to the leisure time activities of pupils, endorsed by 34 schools. Next in order, are the objectives of making students better house-holders, making them appreciative of craft products, enabling them to gain manipulative skills. The least accepted objective (endorsed by 11 schools) is that of offering opportunity for guided exploration and experimentation in practical situations.

Most of the responses to the question on the extent, to which the objectives are being fulfilled indicate that the schools are satisfied with the objectives being made in the craft teaching.

Crafts Taught

The most popular crafts in the Gujarat schools are spinning and weaving being followed by almost half of the schools. The next craft in popularity is embroidery or needle work, followed by tailoring, sewing, wood-work and agriculture. The details may be seen in table No. 24. As will be seen there does not seem to be any difference in the crafts taught in high schools and multi-purpose schools. Embroidery and sewing, as can be expected are taught only in girls' or co-educational schools.

The schools usually provide only one craft to a pupil. However, there are some schools which have provision for two crafts. The main reason for students choosing a craft is that the craft is provided in the school. Most of the schools have indicated this clearly. Very few schools mention other reasons : students' aptitudes, hereditary nature of craft, choice of parents and choice of teachers.

Most of the schools indicate that it is not possible to change the craft. Only 18 schools feel that there may be a change in the craft. All these schools indicate that the change is possible in standard VIII.

The time devoted to crafts varies in the schools. The usual pattern appears to be devoting 3½ hours per week for craft teaching. The range is from 1½ hours to 6 hours. There is one school which has mentioned 8½ hours, another 10½ hours and two other schools 14 and 20 respectively. It appears that there is some misunderstanding in the reporting of the time devoted to craft teaching by these schools. The general trend seems to be, as indicated above to have 3½ hours per week for craft work. The usual length of the period seems to be 35 or 40 minutes. Most of the schools have periods of 35 minutes duration. Most of the schools (47) feel that the time devoted to craft work is sufficient for the purpose.

Curriculum

Most of the schools indicate that the content of their craft curriculum includes application of the crafts in daily life (45). Most of the schools (43) also indicate that the craft curriculum includes study of the economics of the craft and the scientific basis of the craft. A large number of schools (34) indicate that it contains manipulative skill.

More than half of the schools indicate that the curriculum is integrated with cocurricular activities. But less than half of the schools (23 *i,e.* 36%) indicate that the curriculum is integrated with other subject areas and with the home and community experiences. More than half of the schools indicate that the curriculum stresses the creative aspects of craft. Less than half of the schools feel that it stimulates interests in the pupils for preparing them for craft pursuits beyond the secondary schools.

A small number (17) of schools conduct field trips to places of interest from the stand point of craft education.

Physical Facilities

Accommodation

The size of the classroom used for teaching of craft differs from school to school. The range of the size is from 200 sq. ft. to 1500 sq. ft. It is difficult to find the usual size of the room. It appears that the size in a usual school is from 300 sq. ft. to 500 sq. ft. More than half of the schools indicate that this size is sufficient for the nature of work being done.

In most of the schools (45) there is a separate room specially meant for craft classes. Most of these schools feel that the room provides adequate space for this purpose. Almost all the schools are of the opinion that the room is well-lighted and suitable for the purpose.

About 80% of the schools have adequate storage facilities for keeping craft products completed by students and other material.

Equipment

Of the equipment provided most of the schools (41) seem to be satisfied with the adequacy of the raw-material. The schools also have sufficient tools (38). A little more than half of the schools have display-boards. Almost all the schools indicate that the material provided is sufficiently used.

Most of the schools (46) indicate that raw-materials are provided to pupils in time.

More than half of the schools in Gujarat do not seem to be satisfied with the various instructional material provided for craft instruction. About half of the schools feel the text-books and reference material are provided and that teachers' files of material are available.

Less than half of the schools have provision for pupils' collection of craft designs and craft models and charts. Very few (9) schools have periodical on craft.

Disposal

The usual way of disposing of craft products seems to be through the sale of these products. Most of the sale is done in public. 22 schools have indicated this kind of procedure. Articles are also sold to the students and the staff of the schools and in few schools they are auctioned. Some schools return the articles to the students prepared by them. Some schools store the craft products.

Teachers

In most of the schools one teacher is employed for one craft. One school has reported that it has no teacher. A few schools have 2, 3 or even 4 teachers for the craft (usually for spinning and weaving).

Almost all the schools indicate that they have adequate staff for the teaching of crafts and almost all the schools also indicate that the teachers teaching crafts have received institutional training in crafts.

The replies do not clearly indicate the qualifications of the teachers employed for teaching crafts. It ranges from non-Matric to Graduate education. Usually the pattern seems to be to have Matric-pass S.T.C. teachers having some training in crafts. About half of the schools experience difficulty in securing craft teachers who know their subjects satisfactorily and teachers who are pedagogically trained. Very few schools indicate that they use untrained and unqualified artisans for teaching of crafts in the schools.

The following institutions provide training for craft teachers :

1. Gujarat Vidyapeeth, Ahmedabad.
2. Vallabh Vidyalaya, Bochasan.
3. Chimnabai Udyog School, Baroda.
4. Kelawani Mandal, Balasinar.
5. Government Basic Training College, Rajpipla.
6. Stri Mandal, Surat.

The salary scale differs from school to school. The range seems to be from Rs. 55 fixed to Rs. 100 to Rs. 180. It appears that the usual grade is Rs. 75/- to Rs. 140/-, although there are many variations in the salary scale.

More than half of the schools indicate that the craft teachers are acquainted with the modern practices in teaching of crafts and about half of the schools are of the opinion that the craft teachers participate in community craft activities.

Evaluation

Most of the schools maintain record of pupils' progress (43). About half of the schools indicate that quantitative turnover of the pupils is evaluated. Less than half of the schools evaluate technical competence and creative ability.

Most of the schools have internal assessment of craft work and some (17) have both external and internal.

All the schools hold examinations in craft. About half of the schools hold examination once a year and some schools twice a year. There are a few schools which hold examinations 3 times or 4 times a year. Most of the schools have both theoretical and practical examinations and few schools also have *viva voce.* The schools which indicate (2) that they do not have any practical examinations consider the class marks obtained throughout the year towards examination. 14 schools indicate that the year's work is also taken into consideration in addition to theory and practical examinations. The general position of the examination seems to be to have 50 marks for theory and 25 for practicals and 25 for year's work. The theory paper is of the duration of about 3 hours, the range being from one to three. The practical examination is held for time varying from ¾ hours to 3 hours. The marks prescribed for theory examinations and practical examinations vary respectively between 20 to 100 and 25 to 1000. *Viva voce*, where held, is for a duration of 10 to 30 minutes carrying 10 to 25 marks. Almost all the schools have 35% pass marks prescribed for examinations. Most of the schools take marks into consideration for purposes of promotion.

Suggestions

Promoting craft work

The following steps are reported to be taken by the schools to promote teaching of crafts in the schools.

1. Holding of exhibitions of craft work;
2. Arrangement of visits to exhibitions and other places of interest.
3. Provision of extra period for craft work;
4. Provision of guidance to needy students;
5. Arrangement of film shows;
6. Providing competition for improvement of work;
7. Organising mass spinning on some occasions;
8. Insisting on preparation of articles of daily use.

The following suggestions are offered by the various schools for promoting teaching of craft :

1. Qualified and trained teachers may be provided.
2. Teacher-pupil ratio should be reduced.
3. Adequate funds may be made available.
4. Craft should be made an optional subject.
5. Sufficient accommodation for craft classes may be provided.
6. More time for craft teaching may be given.
7. Adequate raw-material may be made available;
8. Craft should be continued in higher classes;
9. Suitable text-books and reference books should be provided;
10. The profit of craft work should be given to the students.

Table 24

Crafts followed in the secondary schools of Gujarat

	High School			Multi-purpose			Total
	Boys	Girls	Co-ed.	Boys	Girls	Co-ed.	
Spinning	7	—	19	—	—	3	29
Weaving	7	—	19	—	—	3	29
Embroidery (Needle work)	—	7	5	—	1	—	13
Tailoring	—	—	8	—	—	1	10
Agriculture	—	—	1	1	—	3	5
Wood Work	1	—	4	—	—	1	6
Gardening	—	—	—	—	—	1	1
Sewing	—	1	6	—	1	—	8

Crafts

Almost all the schools from Kerala have indicated that craft is a compulsory subject. However, there are four schools which indicate that it is an optional subject. The usual pattern seems to be having craft in the classes 6 to 10 or 6 to 11. There are some variations. Some schools have craft from class 7 while in other schools it is from 6 to 9 or 6 to 8. Some schools teach craft from class 5. However, most of the schools provide teaching of craft for classes 6 to 10 or 6 to 11.

Objectives

The most accepted objective in the secondary schools of Kerala seems to be the contribution of craft in inculcating dignity of labour. 70 schools have endorsed this objective. The next objectives in acceptance seem to be providing vocational outlet of pupils, enabling them to gain manipulative skills, contributing to the leisure time activities and making them appreciative of craft products. The least accepted (endorsed only by 27) seems to be that of offering opportunities for guided exploration and experimentation in practical situations. Most of the schools of Kerala seem to be dissatisfied with the achievement of these objectives in the actual teaching of crafts.

Crafts taught

The most popular craft in the schools of Kerala seems to be embroidery, although it is taught only in girls schools or in co-educational institutions. Equally popular craft is weaving which is a common craft among boys and girls schools. Next in popularity are spinning and book-binding. Tailoring is found in many schools. The details of the crafts practised in schools of Kerala may be seen in the table. No. 25. As will be seen from the table No. 25 there are no differences in crafts taught in high or higher secondary or multi-purpose schools. Metal work and leather work are not found in girls schools. Embroidery or needlework, sewing and home-craft naturally are found only in girls schools or in co-educational schools.

Most of the schools provide only one craft for a student. However, there are some schools which provide two crafts and 2 schools provide 3 crafts. The main reason for the choice of crafts by the students seem to be the provision of the craft in the school. 72 schools have endorsed this. Some schools indicate that the choice is made on the basis of the students' aptitude or the teachers' choice. Very few schools, (6, 7 & 8) respectively indicate that the selection is made on the parents' choice or due to other factors or because craft is hereditary in the family.

Less than one third of the schools mention that it is possible for the students to change craft during the secondary school. Most of these schools indicate that the change can be made either in the 9th or in the 8th grades.

It is not clear how many hours are devoted to craft work by a class during one week. As in other States the replies are different because some schools have indicated hours for craft education for all the classes. However, the range is 1½ hour to 9 hours. The usual pattern seems to be that of devoting about 5 hours per week in one class. 60 schools feel that the periods which are usually of 40 or 45 minutes duration are sufficiently long for craft work.

Curriculum

Most of the schools (70) indicate that the content of the craft curriculum include manipulative skill. The same number of schools indicate that it includes application of craft in daily life. However 53 and 50 schools indicate that the craft curriculum includes study of the economics of the crafts and the scientific basis of the crafts.

Many schools are not satisfied with the integration of the curriculum with different aspects of child's experience. 59 schools indicate that the craft curriculum is integrated with co-curricular activities. Only 29 schools are of the opinion that the curriculum is integrated with other subject areas in the programmes of study. Many schools, however, feel that the curriculum stresses the creative aspect of crafts. 59 schools are of the opinion that the curriculum stimulates interests in the pupils and prepares them for craft pursuits beyond the secondary school.

Only a few schools (7) organise field trips to the places of interest from the stand point of craft education.

Physical Facilities

Accommodation

The schools have not clearly indicated the size of the classroom. Some schools have interpreted it as the number of students in a class while other schools have understood it to be the size of the room in which crafts are taught. The size of the room ranges from 180 sq. ft. to 1200 sq. ft. Most of the schools seem to have craft rooms near about 500 sq. ft. The number of students reading in a class-room vary from 20 to 50. Only 33 schools indicate that the size of the room is sufficient for craft work. About half of the schools indicate that the craft classes are conducted in a separate room and most of these indicate that the room provides adequate space and that it is well lighted and suitable from other points of view.

Only 33 schools indicate that the adequate storage facilities are available to them to store craft products of pupils and other materials and supplies.

Equipment

Many schools (54) are satisfied with the availability of adequate raw-material and of tools. However, the schools in general seem to be dissatisfied with the availability of other equipment like work benches (only 21 schools indicate that they have adequate supply), tables (22), easels (14), showcases (8) and display-boards (11). Most of the schools (68) indicate that the material and equipment supplied to them are used efficiently. The same number of schools indicate that raw-materials are made available in time to pupils.

The usual pattern in the schools seems to be working in groups in the craft activity, although quite a number of schools have individual work. Only some schools provide each student with his own set of tools. The students possessing their own tools range from 2% to 50%. But in most cases the percentage is in the neighbourhood of 10.

The schools do not seem to be satisfied with the instructional materials provided for craft instruction. Only 33 schools indicate that they have sufficient collection of pupils' craft designs and materials. 29 have text-books. Only a few schools have periodicals.

Disposal

The usual pattern of disposal of craft products is to auction them. About half of the schools practise this mode of disposal. Some schools sell the products to pupils and some to the public. Some schools also have the practice of returning the products to the pupils mainly for the reason that the pupils provide raw-material and would like to take the products back.

Teachers

Most of the schools have one teacher for each craft, although quite a large number of schools have only half a teacher, the same teaching two crafts.

Less than one third of the schools indicate that the staff is adequate for each of the crafts.

Most of the schools feel and this is borne out by the remarks made by them in the suggestion part of the questionnaire that the staff is not adequate for crafts.

A large number of schools indicate that the teachers have received institutional training in crafts. It is, however, not clear what the prescribed qualifications are. The general trend seems to be having Matriculates teachers with certificate in education or in crafts. There are some schools employing Middle pass teachers and some schools have Intermediate and B. A. pass teachers.

About half of the schools indicate that they experience difficulty in securing craft teachers who know their subjects satisfactorily and a much larger number of schools indicate that they have difficulty in securing craft teachers who are pedagogically trained. Only a few (16) schools use untrained and unqualified artisans for teaching of crafts in the schools.

The following institutions provide training in crafts :

(1) Industrial Training Institute, Khadi Board.
(2) Industrial Training School.
(3) Government Training Institute, Beypose.
(4) Occupational Institution, Trichur.
(5) Post-Graduate Basic Training College, Trichur.
(6) Basic Training Schools.
(7) Ramvaran Technological Institute, Trichur.

Although the salary pattern varies, the general grade for craft teachers seems to be Rs. 40 to Rs. 120. Some schools employ teachers in the grade of Rs. 55 to Rs. 150 or its variation.

More than half of the schools indicate that the craft teachers follow modern practices of education in teaching craft. 31 schools are of the opinion that the teachers participate in community craft activities.

Evaluation

Many schools do not have any evaluation programmes for crafts. More than half of the schools do not have any examination in craft, only 29 schools have indicated that they have examinations. However, 40 schools have indicated that they evaluate creative ability, 37 maintain record card of progress of pupils and 31 and 29 respectively evaluate quantitative turnover and technical competence.

These schools which have evaluation programmes have internal evaluation, only 4 schools have indicated that they have external evaluation. The examinations are usually held three times a year although there are schools which have one or two examinations in a year.

Most of those schools which hold examinations hold both in theory and practice. A few schools have *viva voce* examination also. The theory paper varies from 1½ hour to 3½ hours, mostly two hours, and the maximum marks are from 50 to 100. Practical examinations are held from 1 hour to 3 hours carrying 40 to 100 marks. Most of the schools have 35% as the pass percentage, the range being from 30 to 50.

Very few (9) schools consider marks obtained in crafts for promotion to higher classes.

Suggestions, etc.

Promoting craft work

Only two special features have been mentioned by two schools to promote craft work—Organising study tours and holding competition and awarding of prizes.

Suggestions

A number of suggestions have been offered by the schools of Kerala to promote craft work. It seems that most of the schools are dissatisfied with the craft work being done in the schools. The following are some of these suggestions. The numbers in brackets indicate the number of schools offering the suggestion :—

(1) Adequate space (25)
(2) Adequate equipment (35)
(3) Qualified and trained staff (45)
(4) Provision of variety of crafts (14)
(5) Enough raw-material (10)
(6) Better syllabus (6)
(7) Craft marks to be considered for promotion (5)
(8) More funds (5)
(9) More time for classes (3)
(10) Craft to be had as an optional subject (3)
(11) Craft to be given compulsory status (3)
(12) Examinations in craft should be held (3)
(13) Better assessment methods (3)
(14) Craft to be correlated with teaching subjects (2)

(15) Craft in conformity with local conditions (3)
(16) Craft should be started only when facilities are available (1)

Talbe 25

Craft followed in the Secondary School of Kerala

[B=Boys ; G=Girls ; C=Co education]

Crafts	High School			Hr. Secondary			Multi-purpose			Total
	B	G	C	B	G	C	B	G	C	
Spinning	4	3	14	2	—	2	—	1	1	27
Weaving	4	3	19	2	—	3	—	1	3	35
Embroidery (Needle work)	—	13	16	—	—	7	—	—	2	38
Tailoring	—	6	8	1	—	6	—	1	—	22
Fibre craft	—	2	4	—	—	—	—	—	2	8
Gardening	—	4	7	—	—	—	—	—	2	13
Book binding	4	3	14	3	—	1	1	—	1	27
Card board work	—	1	1	—	—	—	—	—	—	2
Wood work	1	—	3	1	—	1	—	—	3	9
Sewing	—	2	8	—	—	2	—	—	—	12
Home Craft	—	1	—	—	—	—	—	—	—	1
Leather work	1	—	2	—	—	1	—	—	—	4
Metal work	1	—	—	—	—	—	—	—	1	2
Paper work	—	2	1	—	—	—	—	—	—	3
Cane work	—	—	4	—	—	1	—	—	—	5
Fishery	—	—	1	—	—	—	—	—	—	1

MADHYA PRADESH

Craft

In the secondary schools of Madhya Pradesh craft is a compulsory subject. Only one schools out of 66 has reported that craft is an optional subject. Craft is taught in classes 6 and above. Some multipurpose schools, however, have crafts in classes 9 to 11. Some higher secondary schools also teach craft in classes 9 and above.

Objectives

The most acceptable objective of craft teaching in Madhya Pradesh seems to be that craft inculcates dignity of labour in the students. Most of the schools have endorsed this objective. The next most acceptable objective is the contribution of craft in exploring the aptitudes and interests of pupils. A little more than half of the schools accept the objective of enabling the student to gain manipulative skills and the contribution of craft to leisure time activities of pupils. About half of the schools work for the objective of providing vocational outlet to pupils through crafts. The least acceptable objective is that of offering opportunities for experimentation in practical situation. The other objectives viz., providing specialised experience to develop abilities, making the students better house-holders and giving them confidence to use inexpensive and locally available material, are accepted by a little less than half of the schools. Most of the schools feel that these objectives are being fulfilled quite well in their schools.

Crafts Taught

Gardening appears to be the most popular in the schools of Madhya Pradesh. This is followed by spinning and weaving. Wood work and tailoring come next, followed by embroidery. The details may be seen in the attached table No 26. As will be seen, spinning, weaving, gardening, tailoring, printing and soap-making are the crafts which are introduced only in higher secondary and multi-purpose schools. There does not seem to be any difference in boys' and girls' crafts excepting for embroidery in girls' and metal craft and engineering in boys' schools.

The schools in Madhya Pradesh provide only one craft to the students at a time. There are only five schools which mention that they provide 2 crafts to the students. The most important reason of choosing the craft is that it is provided by the student. About 1/3rd of the total number of schools mention that the choice of the craft is based on aptitude of the student. Very few schools have mentioned other factors like hereditary status of craft, parents' choice or teachers' choics as factors determining selection of crafts by the students.

A little more than 1/3rd of the schools mention that it is possible to change craft in the secondary school. Most of theis schools suggest that the change is possible in the 9th clase although there are some schools which suggest that the change possible in grade 8.

As in case of other States, the replies to the question as to how many hours are devoted to craft teaching are not very clear. The range seems to be from 1¾ hours to 3 hours per week, although a few schools mention one hour or even less. The general trend seems to be having about 2 hours. The period for craft teaching is usually of the duration of 40 minutes, the range being from 35 to 45. About half of the schools feel that the class periods available for craft teaching are of sufficient length.

Curriculum

Most of the schools (56) feel that the curriculum includes material which stresses proper application of the craft in daily life. More than half of the schools feel that the curriculum includes content related to manipulative skill. A little more than half of the schools indicate that the content of the craft curriculum are related to the study of the economics of the crafts and the scientific basis of the craft.

More than half of the schools seem to be satisfied that the curriculum is integrated with the home and community experiences and with co-curricular activities. About 1/3rd of the schools, however, feel that the craft curriculum is integrated with the other subject areas in the programme of studies. Most of the schools are satisfied that the craft curriculum stresses the creative aspect of crafts. More than half of the schools indicate that the craft curriculum stimulates interests in the pupils and prepares them for craft pursuits beyond the secondary school.

Only a very small number of schools (15) conduct field trips to places of interests from the stand point of craft education.

Physical Facilities

Accommodation :

Replies to the question asking the size of the classroom are quite vague, Some schools have interpreted it as the size of the room and some schools have interpreted it as the number of students in the craft class. The number of students in the classroom ranges from 12 to 40, the usual size pattern being 30 to 35. The size of the craft room ranges from 200 sq. ft. to 1600 sq. ft. The usual size seems to be about 600 sq. ft. About half of the schools feel that the size of the classroom is commensurate with the nature of the work.

A little more than half of the schools have separate room available for conducting craft classes. Most of these schools seem to be satisfied with the space in the room provided for this purpose and that the room is well lighted and suitable from other points of view.

About one third of the schools have adequate storage facilities where they can keep the work done by pupils and other material and supplies available to them.

Equipment :

The secondary schools of Madhya Pradesh do not seem to be satisfied with the working facilities available in the form of various kinds of equipment. About half of the schools indicate that they have adequate supply of tables and less than 1/3rd indicate adequate supply of work benches and easels. About half of the schools are satisfied with the available tools for craft work.

About half of the schools feel that the material and equipment given is efficiently used. 48 schools indicate that the raw-materials are made available to the pupils in time.

In most of the schools work is done both in groups and individually. There are some schools in which work is done only individually. About 1/3rd of the schools mention that the pupils have to share their tools with other pupils and the trend seems to be sharing of tools in groups of 5 pupils. Only a few schools (11) keep the workshop open outside regular school hours. The time ranges from 10 minutes to 90 minutes. The percentage of students who make use of the facility of workshop being opened outside school hours ranges from 5 to 100, usual pattern being that of 100.

The range of percentage of students who possess their own set of tools is a long one from 5 to 100. The trend is not clear from the replies received. The replies to the question of the percentage of students practising craft at home for pleasure is not clear. Range is again from 5 to 100. The usual pattern appears to be the neighbourhood of 50. A little more than 1/3rd of the schools are satisfied with the availability of text-books and reference material for craft work. About 1/3rd of the schools indicate that they have instructional materials in the form of craft models and charts and pupils' collection of craft designs. Much less schools have teachers' file and material and only a few schools indicate that they have periodicals for this purpose.

Disposal :

The more common pattern of disposal of craft products seems to be in the form of returning these to the pupils. A few schools sell them, some to the pupils and the staff, others to public, and a few by auction.

Teachers

Usually schools have one teacher for one craft, although in some schools one teacher teaches 2 crafts and 2 schools do not have any craft teacher.

Less than half of the schools indicate that the teachers in their schools have received institutional training in crafts. A little more than one-third of schools are satisfied with the staff available for teaching of crafts. A large number of schools (55) indicate that they experience difficulty in securing teachers who know their crafts well and those who are pedagogically trained. Untrained and unqualified artisans are employed only in 19 schools.

It is not clear what qualifications are prescribed for the teachers who teach crafts in the secondary schools. From a few replies received in the questionnaire there seem to be two trends, one having high school passed teachers with training or diploma and the other having trained Graduates for teaching of crafts.

The following institutions are mentioned as providing training facilities for teachers in craft :

1. Industrial Training School, Bilaspur.
2. Soap-making Training Institute, Indore.
3. Gardening Training Institution, Indore.
4. Kala Niketan, Jabalpur.
5. Vocational High Schools, Jabalpur (also at Khandwa and Raipur).
6. Government Basic Training College, Jabalpur.
7. Prantiya Shikshan Mahavidyalaya, Jabalpur.
8. Home Science College, Jabalpur.

The usual grade of craft teachers appears to be Rs. 60-120. Some schools employ craft teachers in the grade of Rs. 70-130 ; and the school has a teacher in the grade of Rs. 150-250. The usual pattern seems to be from Rs. 60-120.

Only a few schools (20) mention that craft teachers are acquainted with modern practices in teaching of crafts and less schools (14) say that the craft teachers participate in the community craft activities.

Evaluation

Most of the schools assess the work of pupils by maintaining record of pupils' progress. A little more than 1/3rd schools evaluate creative ability and about 1/3rd schools evaluate quantitative turnover. Only a few schools seem to evaluate the technical competence of pupils.

The schools excepting a few have internal assessment of craft work. Usually there are three examinations in a year. Most of the schools have both theoretical and practical papers. The time for theory paper ranges from 1½ hours to 3 hours and the maximum marks from 25 to 100. Usually there is only one paper. The time for practical examination varies from 1 to 3 hours and marks from 25 to 100. 15 schools report that they hold *viva voce* examination and the time varies from 10 minutes to 30 minutes and marks from 10 to 100.

40 schools mention that the marks obtained in craft are taken into consideration for promotion and 23 schools mention definitely that these are not considered for promotional purposes. The minimum number of pass marks vary from 25% to 50%, usual pattern being 33%.

Suggestions etc.

Promoting Craft Work

Some schools report the following steps being taken to promote instructional work in crafts :

1. Offering prizes.
2. Arranging trips.
3. Organising the exhibitions.
4. Giving practical examination.
5. Preparing small things of daily use.
6. Encouraging competition.
7. Organising demonstrations.
8. Organising visits to craft centres.
9. Providing extra classes.
10. Using 'play-way' method of teaching.

Suggestions

The following suggestions are offered by the various schools to improve craft in the schools. Numbers within brackets indicate the number of schools offering the suggestion :

1. Providing qualified and trained teachers —(31).
2. Providing more funds—(29).
3. Providing more material and equipment—(14).
4. Providing teacher accommodation—(13).
5. Providing more time for crafts—(9).
6. Increasing number of craft teachers—(7).
7. Holding external examinations—(4).
8. Provision of more crafts in the schools—(4).

TABLE 26

Crafts followed in the Secondary Schools of Madhya Pradesh

[B=Boys ; G=Girls ; C=Co-educational]

	High School			Hr. Secondary			Multipurpose			
	B.	G.	C.	B.	G.	C.	B.	G.	C.	Total
Spinning	—	—	—	5	3	6	8	—	4	26
Weaving	—	—	—	4	3	5	8	—	4	24
Gardening	—	—	1	8	4	15	6	—	5	40
Tailoring	—	—	—	1	1	6	4	—	1	13
Wood Work	1	—	—	3	—	3	4	—	3	14
Sewing	—	—	—	—	7	2	—	—	—	9
Cardboard work	—	—	—	2	—	1	—	—	—	3
Drawing	—	—	—	4	—	—	—	—	1	5
Leather Work	—	—	—	—	1	—	—	—	—	1
Embroidery	—	—	—	—	9	1	—	—	—	10
Printing	—	—	—	—	—	1	1	—	—	2
Typing	—	—	—	—	—	1	—	—	—	1
Metal Craft	1	—	—	—	—	—	—	—	—	1
General Engg.	1	—	—	—	—	—	1	—	—	2
Soap Making	—	—	—	2	1	—	1	1	—	5
Clay Modelling	—	—	—	—	1	—	—	—	—	1

MADRAS

Crafts

Craft is a compulsory subject in almost all the schools of Madras. However, there are 11 schools in the present sample which have indicated that the craft is taught as an optional subject in those schools. Craft is introduced in all she schools in grade 6, there being only two schools which have variation. In one school craft is introduced in grade 5 and in another school in grade 3. The usual pattern of craft education is to have craft from 6th to 10th or 11th grade. But there are some variations and in some schools craft is taught only up to grade 8 and in other schools up to grade 9. There is one school in which craft is taught only in 6th or 7th grade.

Objectives

The most accepted objective, endorsed by 55 schools, is inculcating dignity of labour. The next in acceptability appears to be enabling students to gain manipulative skills. This is endorsed by 51 schools. 47 schools have endorsed the objectives of contributing to the leisure time activities of pupils and providing vocational outlet to them. The least accepted objective, endorsed by 18 schools is that of offering opportunity for guided exploration and experimentation in practical situations. The schools seem to be satisfied regarding the achievement of these objectives in the schools.

Crafts taught

The most popular craft in the secondary schools of Madras appears to be weaving. 38 schools have this craft. Next in order of popularity is wood work followed by 26 schools and spinning followed by 20 schools and drawing (if this can be regarded as a craft) followed by 19 schools. The details of various crafts offered by different schools appear at the end in Table No. 27.

As will be seen from the table there is no difference in the crafts followed in high schools and multi-purpose schools. Sewing, tailoring and fibre craft are taught only in girls or mixed schools.

Almost all the schools provide only one craft. There are 13 schools which have reported that they have provision for each student to offer more than one craft, usually two crafts.

The most important reason mentioned by 58 schools for the students selecting a particular craft is the provision of the craft in the school. The next important reason given by 31 schools is the aptitude of the students. The other reason viz., parents' choice, teachers' choice or the craft being hereditary in the family are mentioned by only a few schools.

A little less than half of the schools mention that it is possible to change crafts in the secondary classes. Most of the schools mention that this change is possible in grade 2 while a few inform that this change is possible in grade 8.

Time devoted by one class to craft work in one week varies from 45 minutes to 17 hours. The usual trend seems to be the provision of one and a half hours for each class per week for craft work. The duration of the period varies from 40 minutes to 60 minutes, the usual practice, being have a period of the duration of 45 minutes and in some cases of 40 minutes. 50 schools mention that the period is of sufficient length for craft work.

Curriculum

Quite a large number of schools (66) mention that the craft curriculum stresses the creative aspects of craft. Quite a large number of schools (67) are of the opinion that the contents of the craft curriculum include manipulative skill. 64 schools feel that the craft curriculum includes application of craft in daily life. Only 47 and 45 schools respectively are of the opinion that the craft curriculum includes scientific basis of the craft and study of the economics of the craft.

Schools do not seem to be well satisfied with the integration of the curriculum with other activities. 57 schools feel that the craft curriculum is integrated with home and community experiences. The number of schools with the opinion that it is integrated with co-curricular activities is 42 and of those who feel that it is integrated with other subject areas is 31. 54 schools express the opinion that the craft curriculum is stimulating for pupils and prepares them for craft pursuits beyond the secondary school education. Only 22 schools conduct trips to places that are of interest from the point of view of craft education.

Physical Facilities

Accommodation

The answers to the question about the size of craft class are vague as for any other state. The enrolment mentioned by some schools in the craft class varies from 24 to 50, the usual number of students being 40. The size of the class room varies from 750 sq. ft. to 1250 sq. ft. The usual size seems to be in the neighbourhood of 500 sq. ft. 41 schools are of the opinion that this size is commensurate with the nature of the work done.

59 schools have separate rooms set up for purposes of craft classes. The majority of these schools felt that the room has adequate space and that it is well-lighted and suitable from other points of view. 46 schools report that they have adequate facilities for storing craft products prepared by students and other materials and supplies.

A large number of schools (61) report that they have adequate supply of raw-material. Equally large number of schools (55) have adequate supply of tools. Schools seem to be less satisfied about other working facilities like benches (32), tables (30), easels (24), show-cases (19) and display boards (24). Almost all the schools mention that the materials supplied are being efficiently used.

Almost all the schools report that raw-materials are available to pupils in time.

In most of the schools pupils work both in groups and individually. Only 24 schools however, mention that they provide individual tools to pupils. In most of the schools pupils have to share tools and the number with whom they have to share varies from 1 to 8, the usual practice being 5 or 6.

Only 12 schools report that they keep the workshop open for pupils outside regular school hours. Only a few schools have mentioned the percentage of students utilising this facility. This seems to be 10%.

The schools do not seem to be satisfied with the instructional materials provided to them for craft work. 41 schools report that they have provision for craft models and charts. A little more than 1/3rd of the schools report supply of reference materials, teachers' file of materials and pupils' collection of craft designs. Only a few schools have periodicals or text-books available.

Disposal

The usual practice adopted by the schools of Madras for disposing of craft products prepared by students is through sales. 34 schools report that they auction the material. 14 schools sell the material to the public while 8 schools sell them to staff and others. 9 schools report that they return the material to the pupils. Only one school has mentioned that the material is stored.

Teachers

Most of the schools have only one teacher for one craft. Some schools have one teacher for two crafts and in a few schools one teacher teaches 3 crafts. There are few schools which have two teachers or 3 teachers.

53 schools mention that the staff for various crafts is adequate. A large number of schools (68) mention that the craft teachers in their

school, have received institutional training.

Only a small number of schools experience difficulty in securing craft teachers who know their subjects satisfactory (27) or those who are pedagogically trained (35). Only a few schools (6) utilise untrained and unqualified artisans for teaching of crafts in the schools.

The following institutions provide training facilities for crafts in the schools :—

(1) Lady Willingdon Institute for Craft, Madras.
(2) Government Teachers' College, Madras.
(3) Government Technical Institute at Coimbatore, Madras and Venaspet.
(4) Textile Institute, Madras.
(5) Arts & Crafts School, Kumbakenar.
(6) Government Textile Institute, Coimbatore.
(7) Harijan Industrial Institute, Vidonlaklsam.

From the information available it appears the usual grade of craft teachers is Rs. 50-90. There are many variations. Some schools have craft teachers in the grade of Rs. 35 to Rs. 55, some others in the grade of Rs. 60-100 and some from Rs. 41 to Rs. 80. There are schools which have teachers in the grade of Rs. 90-140. There are other variations also. But on the whole the grade in most of the schools seems to be from Rs. 50-90. 50 schools have indicated that the teachers follow modern practices of teaching. However, only 17 schools are of the opinion that teachers participate in community craft activities.

Evaluation

42 schools report that they maintain record of pupils' progress for purposes of evaluation. 46 schools mention that they evaluate quantitative turnover. 28 and 25 schools respectively evaluate creative ability and technical competence.

Only a small number of schools (23) hold examinations in craft. However, most of the schools have some way of having assessment of the craft work. Mostly craft is assessed by internal assessment. Those schools which hold examinations usually have three examinations in a year. The usual pattern is to have one theory and one practical paper. The theory paper varies from one hour to 2½ hours with marks 35 to 100. Practical examination is held from ½ an hour to 3 hours and carries marks from 35 to 100. The minimum percentage of pass marks in the majority of schools is 35, the variation being from 25 to 40. Most of the schools do not take craft marks into consideration for purposes of promotion. Only two schools have mentioned that the marks are taken into consideration.

Suggestions, etc.

Promoting craft work

The following steps have been reported by various schools taken to promote craft work in the schools :

(a) Arranging exhibitions ;
(b) Providing prizes for craft work ;

(c) Arranging competitions ;
(d) Stressing preparation of articles of daily use.

Suggestions

The following suggestions are offered by the various schools to promote teaching of craft :—

(1) Adequate equipment to be provided (9).
(2) More periods for crafts to be allotted (9).
(3) Adequate finance to be made available (8).
(4) Variety of crafts to be introduced (8).
(5) Craft to form as a part of examination subjects (6).
(6) Teacher pupil ratio to be reduced (7).
(7) Craft to be made compulsory (5).
(8) Adequate accommodation to be provided (5).
(9) Trained teachers to be provided (4).
(10) Craft attendant to be given to teachers (3).

TABLE 27

Crafts followed in the Secondary Schools of Madras.

Crafts	High Schools			Multi-purpose			Total
	Boys	Girls	Co. Edu.	Boys	Girls	Co. Edu.	
Spinning	6	—	4	2	—	8	20
Weaving	11	2	11	2	—	12	38
Book-binding	2	—	3	—	—	1	6
Gardening	4	1	2	1	—	6	14
Wood work	8	—	4	5	—	9	26
Drawing	4	5	4	1	1	4	19
Paper work	2	—	—	—	—	1	3
Rattan (cane) work	1	—	—	—	—	—	1
Home crafts	1	5	1	—	2	—	9
Music	1	2	2	—	1	1	7
Embroidery (needle work)	—	6	4	—	2	4	16
Fibre crafts	—	1	—	—	—	—	1
Tape making	—	—	1	—	—	—	1
Cardboard work	—	—	1	—	—	1	2
Pottery	—	—	1	—	—	1	2
Agriculture	—	—	1	1	—	2	4
Tailoring	—	—	—	—	1	2	3
Sewing	—	—	—	—	1	1	2

Crafts

In the State of Maharashtra, craft is a compulsory subject in the secondary schools usually for classes V to VII. Some schools have crafts only in classes V and VI, while some others have in classes VI and VII. A few schools provide crafts on a compulsory basis in classes VIII, IX and X also. Some higher secondary schools have this provision up to 9th class. The usual pattern seems to be of providing crafts for classes V to VII. Only one school has reported that craft is provided on an optional basis; in all other schools crafts seems to be a compulsory subject.

Objectives

All the ten objectives mentioned in the questionnaire have been ticked by the majority of schools. The most accepted objectives seem to be inculcating dignity of labour (42 out of 61 responses have accepted this); enabling pupils to gain manipulative skills (41); providing vocational outlet for pupils (41); and contributing to leisure time activities of pupils (40). The least accepted objective seems to be the opportunity crafts provide for exploration of practical situations (14). The objective of providing specialised experience to pupils in order to develop their ability also seems to be less accepted (22).

Most of the responses to the question to what extent these objectives are being achieved indicate that the objectives are being fulfilled only to some extent. Some responses indicate satisfaction in achievement of the objectives.

Crafts taught

Spinning and Weaving are offered in most of the schools of Maharashtra, followed by wood-work, tailoring and card-board work. Paper-making is also one of the popular crafts. In the Girls' schools and mixed schools sewing and embroidery are popular. The attached table No. 28 gives the details of the crafts practised in the schools of Maharashtra. As will be seen, the crafts practised are: spinning, weaving, clay-modelling, wood work, tailoring, book-binding, card-board work, paper making, gardening, sewing, agriculture, embroidery, metal craft, drawing, home crafts, technical subjects and soap-making.

There does not seem to be much difference in the crafts followed in high schools and multi-purpose schools. Metal craft is practised only by one multi-purpose school. Similarly soap-making is practised by one higher secondary school.

All the schools provide only one craft to the students at a time. The majority of the students choose the craft because it is provided for in the school. Only 17 schools have mentioned that the crafts are provided according to the aptitude of the pupils and only a few schools have mentioned the factor of teachers' choice and hereditary craft as being important in determining the choice of the pupils.

Most of the schools mention that it is not possible to change the crafts in the secondary stage. Only 19 schools mention such a possibility. Most of these schools mention that the change is possible in the class 8 while 2 schools mention the possibility in the class 9 and one school mentions 7th class as the grade in which this change is possible. The replies to the question as to how many hours are devoted to craft teaching are not very clear. Some schools seem to have given figures for all the classes and most of the schools seem to have mentioned the figures for one class only. The trend seems to be of devoting between 1½ hours to 3 hours per week for a class for craft teaching. The period is usually of 35 or 40 minutes duration. Most of the schools (46) feel that the time allotted for craft work is sufficient.

Curriculum

Most of the schools (50) feel that the curriculum stresses the creative aspects of craft. Most of the schools also feel that the curriculum followed in their schools is integrated with home and community experiences, although only some schools (26) feel that craft curriculum is integrated with other subject areas and that it is integrated with co-curricular activities.

Almost all the schools (56) indicate that the contents of craft curriculum have sufficient application in daily life. The majority of the schools (46) feel that the contents of the curriculum include manipulative skills. Some schools indicate that the curriculum includes study of economics of the craft and the scientific basis of the craft.

41 schools out of 61 indicate that the curriculum stimulates interest in the pupils and prepares them for craft pursuits beyond the secondary school.

With regard to the utilisation of field trips in teaching of crafts, only a few schools (13) mention that this is being done.

Physical Facilities

Accommodation

The average size of the class-room used for craft purposes seem to be 500 sq.ft. Various sizes have been indicated and the range seems to be from 200 sq.ft. to 2400 sq.ft. Most of the schools (43) feel that this accommodation is sufficient for the craft work.

In most of the schools there is a separate room provided for the craft work and this room seems to be well lighted and quite suitable (53 out of 61 feel this).

42 schools have adequate provision for storing pupils' hand-work, general material and supplies.

Equipment

Of the equipment provided, raw-material is indicated to be adequate by 50 schools while 39 feel that work benches are sufficient. 36 indicate tables being sufficient. The majority of the schools feel that they have sufficient tools to work with. Show-cases and display-boards are not found to be in sufficient number by many schools.

Almost all the schools indicate that the materials and equipment supplied to them are being sufficiently used. Most of the schools (53) are satisfied that raw-materials are made available to the pupils in time.

In most of the schools students work individually and about half of the schools provide each student with his own set of tools. The schools which mention that the student has to share tools with other students indicate that he has to share with three or four students. Only one school has mentioned that the student has to share with 35 students. The reply to the question on the percentage of students possessing tools at home, is quite vague and does not give much information.

Only a few schools keep the workshop open out-side regular school hours. Such schools mention that about 25% students utilise this provision.

Of the instructional materials provided, for craft work, about half of the schools have provision for craft models and charts and material for teachers. The text-books for crafts are provided only in a few schools (19). Similarly periodicals are provided by only a few schools (11). Some schools (27) have pupils' collcetion of designs and materials and some have reference materials for the use of the teachers.

Disposal

23 out of 61 schools mention that the articles produced by the pupils are returned to them. 13 schools sell the articles to the public and only a few schools sell them to the pupils (5) or auction them (4) or keep them in the schools (3). On the whole, there seems to be lack of attention being paid to the problem of disposal of craft products.

Teachers

Most of the schools have only one teacher for one craft and in many cases one teacher teaches two crafts and in one case 3 crafts. Some schools have three teachers and a few have two teachers.

47 schools indicate that the teachers have received institutional training in crafts. It is not clear whether this reference to the training is to the professional educational training provided in a Basic training institution or whether this indicates a separate professional craft training. Almost half of the schools mention that they experience difficulty in securing craft teachers who know their subjects satisfactorily. 36 schools feel difficulty in securing craft teachers who are pedagogically trained. Only 11 schools use untrained and unqualified artisans for the teaching of crafts.

The majority of the schools (51) feel that the staff given is adequate.

It is not clear what qualifications are prescribed by the State for craft teachers. On the whole the craft teachers in the schools of Maharashtra have diploma in crafts. Some of them are Basic trained at Wardha. In some schools the craft teachers are Matric pass.

The following institutions provide training for craft teachers in the State :

(1) Handi-crafts School—Akola.

(2) Industrial Training Institute—Amravati.

(3) Government Basic Training College—Amravati.

(4) Handicrafts Teachers Training College—Bombay.
(5) J. J. School of Arts—Bombay.
(6) Elphinstone Technical High School—Bombay.
(7) Government Industrial Training Institute—Nagpur.
(8) Cottage Industries Training School—Nagpur.
(9) Vocational High School—Nagpur.
(10) Khadi Gramudyog Mahavidyalaya—Nasik.
(11) Industrial Training Institute—Oudh.
(12) Institute of Modern Art—Poona.
(13) Khadi Gramudyoga Mahavidyalaya—Wardha.
(14) Bhartiya Kala Prsarani Sabha.
(15) Buldana school of Carpentry.

Most of the schools pay craft teachers in the grade of Rs. 72-150. The grades range from Rs. 50-80 to Rs. 110-200.

37 schools mention that the craft teachers follow modern way of teaching, while 13 mention that they follow traditional methods. Very few institutes have mentioned that the craft teachers participate in the community craft activities.

Evaluation

In most of the schools assessment in crafts is done through internal assessment. Almost all the schools mention that they hold examinations in craft. Most of the schools have examinations twice a year while some have thrice a year. Only a few hold either once a year or four times a year.

39 schools mention that the marks obtained in the craft are taken into consideration for promotion of pupils. The minimum pass marks range from 33 to 35%.

The general pattern of the examinations seems to be one paper of theory carrying 50 marks of the duration of one and a half hours and similar one paper in practical.

47 schools indicate that the progress of the pupils is evaluated by maintaining records of the progress of pupils. About half of the institutions mention that creative abilities of the pupils are also evaluated and equally half of the schools mention that they evaluate the quantitative turnover of craft work by the pupils. Only a few institutions evaluate the technical competence of the pupils.

Suggestions etc.

Special features

Only a few schools have mentioned some special features of craft education. These are the following :

(i) Pupils have won many prizes in the craft exhibition.
(ii) Craft is taken up by some pupils as a hobby.

(iii) Pupils prepared their own garments after school hours.

Promoting craft work

The following steps are reported to be taken by the various schools to promote craft work in the institutions .—

(i) Exhibition of work.

(ii) Encouraging competition.

(iii) Extra craft work for interested pupils.

(iv) Stressing both theory and practice.

(v) Encouraging working of pupils during leisure time.

(vi) Providing good tools.

(vii) Organising pupils in groups,

(viii) Providing freedom to pupils to adjust.

(ix) Organising vocational classes during long vacation.

(x) Propagating.

(xi) Awarding prizes.

(xii) Supplying material, free of charge to the poor pupils.

(xiii) Preparing articles of daily use.

(xiv) Providing material to pupils.

(xv) Organising hobby clubs.

(xvi) Selling articles to the pupils at nominal cost.

Suggestions

The following suggestions are offered by the various schools to improve craft work. Number of schools offering the suggestions are indicated in the brackets :—

(i) Sufficient funds should be provided for craft (14)

(ii) Trained craft teachers should be provided (10)

(iii) Proper material and equipment should be provided (9)

(iv) Adequate accommodation for craft work should be provided (7)

(v) Craft should be made an additional subject (4)

(vi) Pupil-teacher ratio should be reduced (4)

(vii) Definition of syllabus should be provided both in theory and practice (4)

(viii) Craft should continue as a subject in the college courses (3)

TABLE—23

Crafts Practised in the Secondary Schools of Maharashtra

Crafts	High School			Hr. Sec. School			Multipurpose			Total
	B	G	C	B	G	C	B	G	C	
Spinning	1	—	6	—	—	2	2	1	5	17
Weaving	1	—	5	—	—	1	2	1	4	14
Clay modelling	1	—	—	—	—	1	—	—	—	2
Wood work	2	—	6	—	—	—	1	—	5	14
Tailoring	1	1	11	—	—	—	—	—	2	15
Book binding	4	—	4	—	—	—	—	—	—	8
Card board work	6	—	7	—	—	—	—	—	—	13
Paper making	4	—	3	—	—	1	1	—	2	11
Gardening	—	—	1	—	—	1	1	1	2	6
Sewing	—	6	6	—	—	—	—	2	1	15
Agriculture	1	—	—	—	—	—	—	—	—	1
Embroidery (needle work)	—	5	2	—	—	—	—	2	2	11
Metal craft	—	—	—	—	—	—	—	—	1	1
Drawing	1	—	1	—	—	—	—	—	—	2
Home crafts	—	—	1	—	—	—	—	—	—	1
Technical subject	—	—	1	—	—	—	—	—	—	1
Soap making	—	—	—	—	—	1	—	—	—	1

MYSORE

Crafts

Almost all the secondary schools of Mysore have craft as a compulsory subject. A few schools have indicated that carft is both compulsory and an optional subject. Generally craft is introduced in the 8th grade and many schools have indicated that it is taught only in the 8th grade. Some schools indicate that it is taught in grades 8 to 11. One school mentions that craft is taught in grades 6 to 8 and a few schools have in grades 6 to 10 or 11.

Objectives

The most accepted objectives of craft teaching in the schools of Mysore appear to be providing vocational outlet to pupils and inculcating dignity of labour. Both the objectives have been endorsed by 56 schools. Next in acceptance are objectives of exploring the aptitudes and interests of pupils and contribution to the leisure time activities of pupils. The least accepted objective, endorsed by 20 schools appears to be that of offering opportunity for guided exploration and experimentation, in practical situations. The schools vary in their feeling about the fulfilment of these objectives. Mostly the schools feel that the objectives are being fulfilled to a good extent.

Crafts taught

The most popular craft in the schools of Mysore appears to be tailoring which is taught in 39 schools. Next in popularity is agriculture which includes mostly horticulture and coffee plantation. There are other crafts, a list of which, along with number of schools following these crafts, appears in the table 29. Typing, dramatics, drawing and music have also been mentioned as crafts. As may be evident embroidery home craft, music are practised only in the girls or mixed schools. Strangely enough spinning and weaving are not found in any girls schools. The other crafts which are found only in boys schools are woodwork, printing, clay modelling and paper work.

The schools provide only one craft excepting a few who have provision for two crafts ; one school provides 3 crafts.

Most of the schools indicate clearly that the craft is selected by the students mainly because it is provided in the schools. This is expressed by 53 schools. The other important reason given by 23 schools is the students' aptitude. The other reasons, viz., choice by teachers or parents or the craft being hereditary in the family, are mentioned by a few schools only.

Only a small number of schools (23) mention that it is possible to change the craft during the high school. Most of these schools mention 9th class as the grade in which such a change is possible. Some schools mention that the change is possible in the 8th grade.

Hours devoted to craft work per week for one class vary from ¾ to 6. The main trend seems to be to devote 3 hours per week for craft work in one class. The length of the period is mostly 45 minutes, although there are some schools having periods of 40 minutes duration. Most of the schools feel that the period is of sufficient length.

Curriculum

Most of the schools feel that the curriculum contains matter having application of the craft in daily life. This is endorsed by 68 schools. 65 schools feel that it contains content having reference to manipulative skill. 49 and 45 schools respectively express that the curriculum contains study of the scientific basis of the craft and of the economics of the craft.

58 schools are of the opinion that the craft curriculum is integrated with home and community experience; 42 feel that it is integrated with co-curricular activities and only 34 feel that it has integration with other subject areas. A large number of schools (61) feel that the curriculum stresses the creative aspect of crafts. 50 schools feel that it stimulates interests in the pupils to carry them beyond secondary school experience. Compared to other States quite a large number of schools (34) report that they conduct field trips to places of interest from the point of view of craft education.

Physical Facilities

Accommodation

The question asking about the size or the craft classes has been differently interpreted by different schools. Some schools, as in other

States interpret this as the size of enrolment while others interpret it as the size of the room. The number of students in the craft class varies from 20 to 60. The size of the class room seems to vary from 150 sq. ft. to 1,200 sq. ft. The figures do not give any indication of the usual size of the class room.

Only a small number of schools (29) have separate rooms set apart for craft classes. Most of these schools indicate that the room provides adequate space and that it is well lighted and otherwise suitable.

Only 33 schools report that they have adequate storage facilities available for keeping craft products made by students.

Equipment

A large number of schools (41) have adequate raw-material available to them. Tools are also available to a large number of schools (43). Other facilities are not available to many schools like work benches (29), tables (33), easels (23), showcases (18) and display boards (15). Most of the schools indicate that the raw-material and equipment received are efficiently used. 49 schools report that raw-materials are made available to pupils in time.

The schools have both individual and group instruction in crafts. Many schools report that they have both types of approach. Only a few schools report that they provide separate tools to individual pupils. The number of students with whom an individual has to share tools varies from 2 to 15. The trend seems to be sharing tools with about 4 persons.

Very few schools keep workshop open after school hours and the percentage of students utilising this facility seems to be about 10.

Schools do not seem to be satisfied with the instructional materials available to them. 33 schools indicate that they have text-books and 29 schools have craft models and charts. Only 17 schools indicate that they have periodicals available for craft work.

Disposal

The usual method of disposal of craft products in the schools of Mysore is that of returning the products to the pupils. Not many schools have given this information, but of those who have replied, a large number of schools indicate this practice. Craft products are also auctioned or sold.

Teachers

As in case of other States most of the schools have one teacher for one craft. There are however, some schools which have no craft teachers and some schools have teachers for one craft but not for other. 3 schools indicate that they have two teachers for one craft and one school has three teachers.

46 schools indicate that the staff for craft work is adequate. 42 schools report that the teachers with them have received institutional training in crafts.

A large number of schools report that they experience difficulty in securing craft teachers who know their subjects satisfactorily (50) and who are pedagogically trained (53). Only a few (13) schools use untrained and unqualified artisans for teaching of craft.

The following institutions provide craft training in the State.

(1) Krishan Rajendar Silver Jubilee Technological Institute, Bangalore.
(2) Agricultural Colleges at Bangolore, Dharwar and Behhal.
(3) Government Basic Training Centres.
(4) Department of Industries & Commerce.
(5) Department of Horticulture.
(6) Polytechnic institutions.

The grade of pay given to craft teachers varies. The usual grade appears to be Rs. 50-120. This grade has some variations. Some schools start from Rs. 60 and some schools indicate that it ends at Rs. 100. One school has mentioned that the craft teacher is paid in the grade of Rs. 150 to Rs. 250 and another Rs. 75-150.

36 schools indicate that their teachers follow modern techniques of craft teaching. Only 15 schools report that the craft teachers participate in community craft activities.

Evaluation

Large number of schools (39) maintain record of pupils' progress. 23 schools report that they evaluate quantitative turnover and creative ability.

It appears that most of the schools hold an examination in crafts. 8 schools have indicated that they do not hold any examination and that the general impression of the day-to-day class work is considered. Mostly the schools take resourse to internal assessment. The usual pattern seems to be having two examinations in a year both in theory and practical. A few schools give examinations only in theory. The time for theoretical paper ranges from 1 to 3 hours and the marks from 25 to 100 while the time for practical examinations ranges from ½ to 3 hours and marks from 35 to 100. A few (7) schools hold examinations in *viva voce*. In their case the maximum marks range from 15 to 50. The usual trend appears to be to have 35% to 50%.

27 schools indicate that they take the marks obtained in craft into consideration for purposes of promotion while 13 schools indicate clearly that they do not consider craft marks for promotion.

Suggestions etc.

Promoting craft work

The following special features have been reported by some schools. These are reported as steps taken to promote craft work in the schools.

(a) Organising competitions ;
(b) Organising lectures ;
(c) Arranging visits ;
(d) Holding exhibitions ;

(e) Holding film shows ;

(f) Encouraging students with special talents ;

(g) Giving rewards and scholarships.

Suggestions

The following suggestions have been offered by various schools in order to promote craft work :—

(1) Trained and qualified staff to be provided (17).

(2) Adequate raw-material and equipment to be provided (12).

(3) More accommodation may be given including separate room for crafts (13).

(4) Separate craft teachers may be provided (10).

(5) Reference books on craft to be provided (5).

(6) Teacher-pupil ratio to be reduced (4).

(7) More grants to be given (3).

(8) More crafts to be introduced (4).

(9) Assistance to be provided for craft (4).

(10) More time to be devoted to crafts (2).

(11) Syllabus to be improved (2).

Table 29

Craft followed in the Secondary schools of Mysore

Craft	High School			Higher Secondary			Multipurpose			Total
	B	G.	C.	B	G	C	B	G	C	
Spinning	1	—	4	1	—	1	—	—	1	8
Weaving	2	—	4	—	—	1	—	—	1	8
Agriculture*	—	3	9	3	—	5	2	1	8	31
Embroidery (Needle work)	—	10	5	—	2	1	—	2	1	21
Tailoring	2	10	12	6	1	3	—	1	4	39
Wood work	2	—	3	3	—	1	—	—	4	13
Technical (mostly electric wire service)	—	—	3	2	—	1	—	—	—	6
Gardening	1	1	5	1	—	1	—	1	—	10
Home craft	—	—	1	—	—	1	—	1	1	4
Rattan work	—	—	—	2	—	—	—	—	—	2
Typing	—	—	—	1	—	1	—	—	1	3
Printing	1	—	1	—	—	1	1	—	—	4
Bee keeping	—	—	3	—	—	1	—	—	—	4
Photography	—	—	—	—	—	2	—	—	—	2
Fibre craft	—	—	1	—	—	—	1	—	—	2
Soap making	—	—	—	1	—	1	—	—	1	3
Fishery	—	—	1	—	—	—	—	—	—	1

***Agriculture includes mostly horticulture and coffee plantation.**

Table 29 (*Contd.*)

Craft	High School			Higher Secondary			Multipurpose			Total
	P	G.	C.	B	G	C	B	O	C	
Dramatics	—	2	2	3	—	2	1	1	2	13
Clay modelling	1	—	1	—	—	1	—	—	—	3
Pottery	—	—	—	—	—	—	—	—	1	1
Drawing	1	2	2	—	—	—	1	—	—	6
Tap making	—	—	—	—	—	—	—	—	1	1
Music	—	1	1	—	1	—	—	—	1	4
Paper work	1	—	—	—	—	1	—	—	—	2
Card board work	—	—	1	—	—	—	—	—	—	1
Book binding	—	—	1	1	—	1	1	—	—	4

ORISSA

Crafts

Responses have been received only from high and higher secondary schools.

Craft is a compulsory subject in all schools except 3 schools which mention that they provide craft on an optional basis. Usually craft is taught in classes 6 to 10 or 6 to 11. A few schools, however, have craft in classes 8 to 11 and one school has craft in classes 8 to 9.

Objectives

Of the ten objectives mentioned in the questionnaire the most acceptable seems to be the contribution of the craft to the leisure time activities of pupils. This is endorsed by 19 schools. This is followed by the provision of vocational outlet to pupils and inculcating dignity of labour. Equally important is the objective that crafts help pupils to become better persons in home by cultivating in them skills for minor repairs. The least acceptable objectives seem to be the provision of opportunities for experimentation in practical situations and provision of specialised experience to help them develop their skills in a better way.

To the question, to what extent these objectives are being fulfilled, most of the schools have given no reply. Some schools mention that it is very difficult to say it for various reasons, mainly because craft has been introduced as compulsory subject only recently. Some schools have indicated great satisfaction while others are satisfied only to some extent.

Crafts taught

The most popular craft in the schools of Orissa seems to be tailoring followed by wood-work and gardening. The other crafts offered are spinning, weaving, embroidery, paper work, technical crafts, home crafts, sewing and steno-typing. Only one school offers steno-typing and it is a higher secondary school. All other crafts are offered by both high schools and higher secondary schools. Embroidery, home crafts and sewing are offered only by girls. The enclosed table 30 giving figures of the crafts offered in the schools of Orissa may be seen for details.

All the schools provide one craft only, excepting 5 schools which have provision for two crafts. Almost all the schools mention that the students select a particular craft only because this is being provided in the school. Only 6 schools mention that the pupils choose crafts being influenced by teachers' choice. The schools giving other reasons viz., influence of parents' choice, pupils aptitude, craft being hereditary in the family and selection being accidental are very few. Most of the schools mention that it is not possible to change crafts in the high school, only 7 schools mention the provision for such a change. Of these schools two mention the change being possible in grade 9 and one each in the 10th and the 8th grades.

Most of the schools seem to be devoting 1½ hours to craft teaching. Some replies are vague as these do not make clear for how many classes the figures are mentioned. On the whole the range seems to be from 1 hour to 2 hours. The craft period generally is of the duration of 30 minutes. Almost half of the schools are satisfied with the length of the craft periods.

Curriculum

Almost all the schools (21) in Orissa seem to be satisfied that the curriculum in crafts includes enough material bearing on the application of the craft in daily life. About half of the schools feel that curriculum contents are related to manipulative skill and less schools are satisfied regarding the inclusion in the curriculum of the content related to the study of the economics of the craft and the scientific basis of the craft.

16 schools out of 24 feel that the craft curriculum is integrated with the home and community experiences. About half of the schools mention that their curriculum is integrated with co-curricular activities. However, only a few schools feel that it is integrated with other subject areas in the programmes of State. More than half of the schools feel that the curriculum in crafts stresses the creative aspect of crafts taught. An equal number of schools feel that the curriculum stimulates interest in the pupils and prepares them for craft pursuits beyond the secondary schools.

Only two schools out of 24 indicate that field trips are conducted to places of interest for craft education.

Physical facilities

Accommodation

The size of the class-room used for craft purposes seems to vary from 200 sq. ft. to 500 sq. ft. The usual size seems to be about 400 sq. ft. More than half of the schools feel that the accommodation provided is suitable for the nature of the work to be done.

Most of the schools have a separate room for conducting classes in crafts. Half of the schools are satisfied with the space provided for this purpose. The majority of the schools feel that the room provided is well lighted and suitable from other considerations.

More than half of the schools have adequate storage facilities for keeping finished products prepared by pupils and general materials and supplies of craft.

Equipment

More than half of the schools seem to be satisfied with the adequate facilities available in the form of tools and in the form of tables for doing work. Half of the schools report having adequate working benches. Less schools are satisfied with easels supplied to them and still less schools with show cases and display boards. As far raw-material, more than half of the schools feel that they have adequate supply of raw-material.

Almost all the schools mention that the materials and equipments supplied are adequately used. Most of the schools are also satisfied that raw-materials are made available to the pupils in time.

Most of the schools provide equipment to groups of pupils—only a few schools have provision for tools for individual pupils. Usually five students seem to share tools ; 2 schools mention that this number is 10 while there are schools in which this number is only 3 or 2. Only 7 schools mention that each student has its own set of tools. The percentage of students possessing tools at home varies from 5 to 60. 15 to 20 seems to be the usual figure.

Only a few schools have provision of opening workshop out of school hours. The percentage of students utilising this provision seems to vary from 5 to 50.

Less than half of the schools are provided with craft models and charts and much less schools report provision of text-books and teachers' file of materials and reference material. Only one school reports that it has provision of periodicals on crafts.

Disposal

About half of the schools dispose craft products by selling them. 3 schools mention that these are returned to pupils while 3 other schools mention that they are kept in the schools for exhibiting them.

Teachers

All the schools report that they have provision of one teacher for one craft. More than half of the schools seem to be satisfied with the staff provided.

Most of the schools report that teachers provided have had institutional training in crafts. However, more than half of the schools mention that they experience difficulty in securing craft teachers who know their subjects satisfactorily and those who are pedagogically trained. Only 5 out of 24 schools use untrained and unqualified artisans for the teaching of crafts in the schools.

Most of the schools have not mentioned anything about the prescribed qualifications of the craft teachers. It seems that Matric pass teachers trained in a particular craft are employed in the schools.

The usual grade in which the teachers are paid seem to be Rs. 50-90. One school employs a teacher in the grade of Rs. 120-250 and another in the grade of Rs. 50-80.

The following institutions provide training in crafts.

(1) Institutions at Angul Bahrampur, Balanjir, Narsinghpur, Nayagarh, Sambalpur Sundargarh and Phoolbund.
(2) Sewing Tailoring Institute, Puri.
(3) Poor Cottage Industries, Cuttack.
(4) Orissa School of Engineering.
(5) Krishi Maha Vidyalaya Bhubneshwar.
(6) Craft Tailoring Centre, Mayurbhanj.

About half of the schools mention that the teachers follow modern practices in teaching crafts in the schools. Only 8 schools mention that the craft teachers participate in community craft activities.

Evaluation

Half of the schools mention that pupils' progress is evaluated by maintaining a record of their progress and by evaluating technical competence of students. Less than half of the schools assess students' ability or the quantitative turnover in crafts.

More than half of the schools have provision of internal assessment. There are only two schools which mention that they have external assessment programmes and 4 schools have both internal and external progress by evaluating creative assessment.

In the majority of the schools examinations are held in craft, usually twice a year. only 3 schools have provision of one examination in a year. The usual pattern of examination seems to be asessing theory and practical aspects of craft work. The usual pattern appears to be having one paper for theory examination (the duration ranges from ½ an hour to 2 hours) carrying marks from 20 to 50. There is also practical examination and the duration ranges from ½ an hour to 3 hours and the marks assigned range from 20 to 100. Only 3 schools hold *viva voce* examination.

The minimum percentage of marks acceptable for a pass seem to be 30. Craft does not seem to be considered necessary subject for promotion. 17 schools out of 24 mention that marks in craft are not considered for promotion; only 5 schools consider these for promotional purposes.

Suggestions etc.

Promoting craft work

The following have been reported by a few schools as steps taken to promote craft work in the schools :—

(1) Giving prizes.
(2) Holding exhibitions.

(3) Preparing articles of daily-use.

Suggestions

The following suggestions are offered by the various schools to improve craft work in the schools. Number of schools offering a particular suggestion are given in the brackets.

(1) Trained craft teachers may be provided (8).
(2) More grants should be provided (6).
(3) More equipment and material may be given (5).
(4) Adequate accommodation may be provided (4).
(5) More crafts may be introduced (4).
(6) More time should be given for crafts (3).
(7) Crafts should be made compulsory (2).

TABLE 30

Crafts practised in Secondary Schools of Orissa

Name of the Craft	High School			Higher Secondary			Total
	B	G	C	B	G	C	
Spinning	1	—	2	—	—	—	3
Weaving	—	—	1	—	—	—	1
Tailoring	3	—	5	—	—	1	9
Tech. Crafts (Sub)	1	—	—	1	—	—	2
Embroidery	—	1	1	—	1	—	3
Wood Work	1	—	2	1	—	2	6
Gardening	1	—	3	—	—	—	4
Paper Work	—	—	1	—	—	—	1
Home Crafts	—	—	1	—	—	—	1
Sewing	—	—	1	—	1	—	2
Steno-typing	—	—	=	1	—	—	1

RAJASTHAN

Crafts

All types of secondary schools have craft in their syllabus. Usually the craft is introduced in classes 6 to 9 in high schools and 6 to 11 in higher secondary and multi-purpose schools. A few schools seem to start crafts in the 7th and 9th classes.

Objectives

The various objectives for teaching of craft are those which are mentioned in the questionnaire viz., (a) contributing to the leisure time activites of pupils; (b) providing vocational outlet of pupils; (c) Helping them to gain manipulative skills; (d) Inculcating dignity of labour; (e) Exploring their aptitudes and interests, (f) Improving their appreciation of craft products; (g) Providing them confidence to use inexpensive and locally available material; (h) Providing opportunity for exploration and experiementation; (i)

Providing experience to develop skills and abilities; (j) Developing skills for house-hold repairs, etc.

Out of 33 responses received the distribution of frequency for the various objectives is more or less the same. The highest frequency is for objective 'd' (27) and the lowest for objective 'h' (15).

Most of the institutions are satisfied that the objectives they have ticked are being fulfilled well. There is only one case in which it is mentioned that the objectives are not fulfilled a all. Some responses mention that the objectives are being fulfilled to some extent.

Crafts taught

The crafts introduced in the schools are agriculture, book-binding, card-board work, clay-modelling, dyeing, gardening, general engineering, metal craft, music, paper making, sewing, spinning, steno-typing, tailoring, weaving and wood work. General engineering and metal craft are found only in the multipurpose schools. Wood work and steno-typing are introduced in some higher secondary schools.

The main reason for the selection of crafts by the students seems to be its provision in the schools. 29 out of 33 responses have mentioned this reason. The next important reason is the students' own aptitude mentioned by 12. The other reasons are teachers' choice (9), hereditary craft (8), accidental (6), and parents choice (5).

A student learns craft for 3 years in case of high schools and 6 years in case of multipurpose schools. 14 schools have mentioned that it is possible for the students to change crafts during the course, usually in the 9th class.

The period or periods provided for craft work are generally of 35 to 40 minutes each. The length differs from 30 minutes to 45 minutes and in one case it is 90 minutes. Average number of hours devoted to craft work is 5.3—the range being from 3 to 10 hours per week. This time seems to satisfy most of the secondary school Principals, as 20 have mentioned that this is of sufficient length, while 13 do not feel that the time devoted for craft work is sufficient.

Curriculum

Almost all the schools feel that the curriculum stresses the creative aspect of craft. Similarly, most of the schools (24) feel thus the curriculum is integrated with home and community experiences and that it is integrated with co-curricular activities (20). Less than half of the schools (14) feel that the curriculum has integration wth other subject areas in the programme of studies.

The schools seem to be satisfied with the content of the curriculum, as most of them feel that the content include manipulative skill (29), study of economics of the craft (23), the scientific basis of the craft (24) and the application of the craft in daily life (26).

Twenty six schools feel that the curriculum stimulates interest in the pupils and prepares them for craft pursuits beyond the secondary schools.

Only a few schools (9) conduct field trips to places of interest from the standpoint of craft education.

Physical Facilities

Accommodation

The size of craft class seems to satisfy almost half of the respondents. The size mentioned ranges from 100 sq. ft. to 600 sq. ft. In most of the schools the craft classes are conducted in a separate rooms. Some high schools do not have separate rooms for craft classes. The room provided seems to be well lighted and otherwise suitable in most cases. It seems that only in about half of the schools, for which responses are received, adequate storage facilities are available for pupils' hand-work, general material and supplies.

Equipment

As for the equipment, raw-material is adequately supplied in most cases. 23 schools mentioned that the raw-materials are sufficient. Some high schools are not satisfied in this respect. Of other equipment the tools are considered sufficient in 24 cases, tables in 17 cases, easels in 13 cases and work-benches in 14 cases. Show cases and display boards are not considered sufficient in the majority of cases. On the whole, the schools feel satisfied with regard the use of this material, supplied. All the schools except 6 say that the raw-materials are made available to the pupils in time.

The tools are used both by the individual pupils as well as in groups, although the trend seems to be more in the direction of using the tools in a group. In one case the tools are shared by 116 pupils, but in other cases the r o range is from 3 to 15.

Of the instructional materials, most of the schools seem to be provided with text-books (23), pupils' collection of craft design and materials (23), teachers' file of materials (22) and craft models and charts (21), reference materials seem to be available in many schools (18). However, only a few (9) schools have provision for periodicals.

Disposal

The main practice in disposal of craft produce seems to be giving these back to the pupils. 11 schools have accepted this practice (only 24 schools have responded, and so about half of the schools seem to be following this practice). Nine schools sell these products to pupils and staff members and other to public. Only three schools have these for school use and only one school has mentioned auctioning of the products as a way of disposal.

Teachers

Information about number of craft teachers employed is not very clear. Some schools have one teacher for one craft. Some schools have one teacher for two crafts, one school has one teacher for three crafts, and in one school one teacher teaches five crafts.

In about half of the schools (19) teachers have received institutional training. Most of the schools have difficulty in getting craft teachers who know their subject satisfactorily (24) and who are pedagogically trained (23), only ten schools employ untrained and unqualified artisans in teaching crafts.

Only half of the schools (18) feel that the staff provided is adequate for the various crafts.

In most of the schools the craft teachers are matriculate with diploma in crafts. In a few cases Inter in Agriculture or B. Sc. (Agr.) and only one M. Ag.—are employed. A few schools are having on their staff B. A. with diploma in crafts.

The teachers in the schools of Rajasthan get their training in crafts at the following institutions :—

(1) Vidyabhawan Handicrafts Institute, Udaipur.
(2) S. T. C. Schools.
(3) Institutions of Social Welfare Departments.
(4) Industrial Training Institute.
(5) Sir J. J. School of Arts, Bombay.
(6) Jamia Millia, Delhi.
(7) Bilaspur Crafts Institute, Bilaspur.

There appear to be 3 scales of pay for teachers teaching craft in secondary schools. Some schools employ craft teachers in the grade of Rs. 50-4-70-5-80, some others have in the grade Rs. 70-140 and some in the grade Rs. 110-225. It is mentioned by one school that the approved grade for a craft teacher is Rs. 70-140; but generally craft teachers are not employed in this grade in secondary schools. An agriculture teacher is paid Rs. 150-250 in one school and a Technical Instructor is in the grade of Rs. 150-300 in another school. On the whole, craft teachers are in the grade of Rs. 70-140 or in variation of this grade.

About half of the schools say that the teachers follow modern practices in craft teaching. In about 50% of the schools craft teachers participate in the community craft activities.

Evaluation

Most of the schools assess pupils' work by maintaining a record of pupils' progress and by evaluating creative abilities. In less number of schools, but in more than half, this is done by evaluating technical competence and by evaluating quantitative turnover.

In most of the schools internal assessment is made for evaluation purposes, and in other schools both internal and external assessment is made. All the schools hold examinations twice a year, in addition to 3 tests by class teachers. The usual pattern of examination is to have one theory paper of 3 hours duration carrying 40 marks and one paper of practical of 4 hours duration carrying 50 marks. There is no special viva voce examination. However, some questions based upon practical examination are asked and marks are allotted out of 10. This makes the total marks for craft examination as 100.

In most of the schools the minimum pass marks prescribed is 36%. In two cases it is 40%. Most of the schools consider the marks obtained in crafts for purpores of promotion. Two schools mention that these are taken into consideration only for the XI class.

Suggestions etc.

Promoting craft work

The following steps have been reported for promoting craft teaching in schools.

(a) Encouraging students to bind their own books.
(b) Organisation of craft week.
(c) Improving competence of teachers through further training.
(d) Providing latest models and charts.
(e) Preparing cloth for the consumption of students and staff.
(f) Seeking cooperation from local skilled artisans.
(g) Organising demonstrations.
(h) Holding special classes.

Suggestions

The following suggestions are offered by the different schools :

(a) Trained craft teachers should be provided (11).
(b) Adequate raw material should be provided (8).
(c) Adequate funds should be provided (8).
(d) Adequate equipment should be provided (5).
(e) Time for craft work should be increased (4).
(f) There should be adequate space for craft (3).
(g) Adequate number of teachers should be provided (3).
(h) Craft exhibitions should be organised.
(i) Prizes should be given to deserving pupils.

TABLE—31

Crafts followed in the Secondary Schools of Rajasthan

Crafts	High School			Hg. Secondary			Multi-purpose			Total
	B	G	C	B	G	C	B	G	C	
Spinning	3	—	3	3	—	—	2	—	1	12
Weaving	3	—	3	3	—	—	2	—	1	12
Wood work	—	—	—	1	—	—	3	—	1	5
Book binding	3	—	—	—	—	—	—	—	—	3
Card board work	4	—	1	—	—	—	1	—	—	6
Clay modelling	3	—	—	—	—	1	—	—	—	4
Drawing	—	—	1	—	—	—	—	—	—	1
Agriculture	—	—	1	1	—	1	—	—	—	3
Paper work etc,	1	—	—	—	—	2	—	—	—	3
Gardening	1	—	—	—	—	1	—	—	—	2
Music	—	—	—	—	—	—	1	—	—	2
Steno-typing	1	—	—	—	—	—	1	—	—	1
General engineering	—	—	—	—	—	—	2	—	—	2
Tailoring	1	2	3	1	5	3	—	—	=	15
Metal Craft	—	—	—	—	—	—	1	—	—	1

Crafts

The institutions answering questionnaires in the State of Uttar Pradesh are both high schools and intermediate colleges. It appears that there are no schools having 11 classes and consequently there are no, what are understood as higher secondary or multi-purpose schools in the State. About 50% of the schools have craft as compulsory subject while other schools have it as an optional subject. There are some schools which mention that craft is both a compulsory and an optional subject. All the schools where craft as a compulsory subject have it in the grades 6 to 8. Those schools in which craft is an optional subject have it in grades 6 to 10 or 6 to 12. One school has also mentioned that craft is taught in grades 5 to 9 and another school in grades 9 to 12.

Objectives

The most accepted objective in introducing craft education seems to be the inculcating of dignity of labour in pupils. The next important are—making the students appreciative of craft products and making them better house-holders. The objectives of providing vocational outlet to pupils, exploring their aptitudes and interests and enabling them to gain manipulative skills seem to be coming next. It seems that the least acceptable objective is to gain pupils' confidence to use the inexpensive and locally available material. The responses to the question as to what extent the objectives are being fulfilled are varied in nature. The general trend seems to be that the schools which have craft as compulsory subject indicate satisfaction in fulfilment of objectives while the schools which have craft as an optional subject reply that objectives are being fulfilled to some extent or that they are not satisfied in this regard.

Crafts taught

Book craft seems to be the most popular craft in the schools of Uttar Pradesh. This is followed by wood work, tailoring and agriculture. The details of the crafts followed in the schools of Uttar Pradesh may be seen in the table 32 given at the end of the report. There seems to be little difference in the crafts taught in boys and girls schools. Music (if it can be regarded as a craft) is introduced only in one school which is a girls' school and embroidery is in two girls' schools. Sewing again is only in girls' schools.

All the schools provide only one craft to the students at a time, with the exception of two schools which have two crafts. Majority of the students choose craft because there is provision for craft in the school. 24 schools also report that the craft is chosen by the students according to their ptitudes. 20 schools report the parents' choice is an important factor. Teachers' choice and hereditary factors do not seem to be important in selection of crafts by the students.

About half of the schools mention that it is possible for the students to change crafts. Most of these schools indicate that the change is possible in 9th class while 3 schools indicate this to be in the 8th and 2 schools in the 10th grades.

As in other States the replies to the question 'how many hours are devoted to craft work' are not clear. The range of answers varies from

1½ hours to 36 hours. Replies are rather vague although the general trend seems to be in the neighbourhood of 8 hours. The periods devoted to craft work are usually of the duration of 40 minutes. Some schools have periods of 45 minutes while a few have of 35 minutes or 30 minutes. Most of the schools seem satisfied with the length of the period.

Curriculum

Most of the schools indicate that content of the craft curriculum includes application of craft in daily life. Quite a large number of schools (51) have manipulative skill in the content of craft curriculum. 39 and 45 schools respectively indicate that the content of the craft curriculum stresses the study of the economics of the craft and of the scientific basis of the craft.

A large number of schools seem satisfied that the curriculum is integrated with the home and the community experience. About half of the schools (27) feel that it is integrated with other subject areas in the programmes of study. About half of the schools are of the opinion that the curriculum is integrated with the co-curricular activities.

A large number of the schools (52) indicate that the curriculum stresses creative aspects of craft. 42 schools indicate that it stimulates interest in the pupils and prepares them for craft pursuits after secondary education.

Very small number of schools (12) use field trips to places of interest from the view point of craft education.

Physical Facilities

Accommodation

The size of the craft class has been interpreted differently by different schools. From the replies of the schools which understand it as the size of the room the range appears to be from 360 sq. ft. to 1200 sq. ft. The average size is about 500 sq. ft. About half of the schools feel that the size is suitable for the type of work done.

A little more than half of the schools have a separate room set apart for the purpose of craft teaching. All the schools which have a separate room indicate that it provides adequate space and that the room is well-lighted and suitable for the purpose.

About half of the schools have adequate storage facilities for storing pupils' craft products and other material.

Equipment

More than half of the schools seem to have sufficient number of work benches, tables and tools and display boards. Most of schools have raw-materials. There are only a small number of schools which have easels and show-cases. Most of the schools indicate that the material and equipment are being sufficiently used. They are satisfied that the raw-materials are made available to pupils in time.

In about half of the schools pupils work independently and in the other half they work in groups. There are, however, many schools in which work is done both individually and in groups. About half of the schools indicate that the students are provided with their own tools. Students in schools where they have to share tools share them with about 4 or 5 other students. There are some schools which indicate that the tools are shared by the groups.

Very few schools keep the workshop open after school hours. The range of the percentage of students utilising this facility in those schools seems to be from 5 to 80.

A large number of schools (45) indicate that they provide craft models and charts. More than half of the schools provide text-books, reference material, teachers' file of material and pupil's collection of craft designs. A small number of schools have periodicals.

Disposal

The usual practice of disposing of craft products is by sale. Most of the schools have indicated this. The craft products are usually sold to the public and in many cases these are auctioned. Some schools return the craft products to students who have made them.

Teachers

Most of the schools have only one teacher for one craft. There are some schools where one teacher teaches more than one craft and in a few schools there are two teachers for one craft.

A large number of schools (45) indicate that the teachers have received institutional training in crafts. About half of the schools indicate that they experience difficulty in securing craft teachers who are pedagogically trained but less than half of tkem have difficulty in securing craft teachers who know their subjects well. Only a few schools use untrained and unqualified artisans for teaching of crafts.

More than half of the schools feel satisfied that the staff for the craft is adequate.

The qualifications of the craft teachers vary among the schools. It is not clear what qualifications are prescribed by the State for the different types of craft teachers. However, it appears that the usual qualifications for craft teachers is intermediate diploma and training in crafts. There are schools employing 7 and 8 grade pass teachers who have some training in crafts and some schools have Graduate teachers. The usual pattern however, is to have high school pass or Intermediate pass teachers.

The following institutions are mentioned as providing training in crafts:—

(1) Junior Teacher Training Institutions.
(2) Training Colleges.
(3) Extension Teachers Training Institutions at Partapgarh, Gorakhpur and Rudarpur.
(4) Wood Work Institute, Lucknow.
(5) Constructive Training College, Lucknow.
(6) Arts & Crafts Centre, Lucknow.
(7) Central Wood Work Institute, Allahabad,

(8) Pedagogical Institute, Allahabad.
(9) Carpentry School, Allahabad.
(10) Art Training College, Allahabad.
(11) Drawing and Handicrafts Centre, Allahabad.
(12) Weaving and Spinning College, Varanasi.
(13) Refresher Course Training College, Partapgarh.
(14) Home Science Training College.
(15) Government Central College, Kanpur.

The usual salary pattern for the craft teachers seems to be from Rs. 75-168 or Rs. 175-200 or Rs. 220. Some schools have teachers in the grade of Rs. 45-90. There are other grades also. In most of the schools, however, the grade is from Rs. 75 to Rs. 200. About half of the schools indicate that the craft teachers follow modern techniques of teaching and much less schools mention that the craft teachers participate in community craft activities.

Evaluation

Most of the schools maintain records of pupil; progress and help in the evaluation of pupils work. About half of the schools evaluate the technical competence. A little less than half evaluate quantitative turnover and creative ability of pupils.

In most of the schools assessment is internal and there are only two schools which have only external assessment. Some schools have both internal and external assessment. Almost all the schools mention that they hold examination in craft. However, there are three schools which do not hold examination in craft. Usually the schools have two examinations in a year although there are some schools which have three. Examinations are usually held both in theory and practical. The range of the duration of the papers for theory is from one to three hours, usually three hours. Some schools have *viva voce* examinations also.

The minimum percentage for pass seems to be 33, the range being from 30 to 40. Some schools have different pass percentage for theory and practical. The usual pattern in these schools is 26% for theory and 40% for practical. Most of the schools take craft marks into consideration for promotion. Ten schools indicate that these are not taken into consideration.

Suggestions etc.

Promoting craft work

The following steps have been reported by some schools to promote craft work :

(1) Introducing craft as a hobby.
(2) Organising exhibitions.
(3) Arranging craft education for boys, not enrolled in the school.
(4) Emphasis on art work.
(5) Organising demonstrations for villagers.

Suggestions

The following suggestions are offered by the various schools in order to promote teaching of craft :

The first four suggestions are given by many schools.

(1) More funds for recurring & non-recurring grants may be provided.
(2) Adequate equipment may be provided.
(3) Suitable workshop for craft work may be provided.
(4) Better teachers.
(5) Students getting training in craft should be preferred in selection.
(6) Better pay for teachers.
(7) Improvement of syllabus.
(8) Adequate raw-material.
(9) Craft classes
10. More training facilities.
(11) Stress on practical work.
(12) Providing books and magazines.
(13) Continuing crafts in the University.
(14) Providing market facilities for craft products.
(15) Stipends to good students.
(16) Combination with Science or Arts.
(17) Power driven machinery may be introduced.

TABLE 32

Crafts followed in the Secondary Schools of Uttar Pradesh

Crafts	High school			Hr. Secondary			Multi-purpose			Total
	B	G	C	B	G	C	B	G	C	
Spinning	—	1	1	3	—	1	1	—	—	7
Weaving	—	1	1	2	—	1	1	—	—	6
Wood work	—	—	1	13	—	—	1	—	—	15
Book Craft	3	—	1	27	—	2	1	—	—	34
Cardboard work	2	—	—	1	1	—	—	—	—	4
Paper work	1	—	—	4	1	—	—	—	—	6
Music	—	1	—	—	—	—	—	—	—	1
Drawing	—	1	—	2	2	—	—	—	—	5
Home craft	—	1	1	1	1	—	—	—	—	4
Tailoring	—	1	—	9	3	1	1	—	—	15
Embroidery	—	1	—	—	1	—	—	—	—	2
Agriculture	—	—	—	9	—	2	—	—	—	11
Doll making	—	—	—	1	1	—	—	—	—	2
Leather work	—	—	—	2	1	—	—	—	—	3
Technical crafts	—	—	—	1	—	—	—	—	—	1
Clay work	—	—	—	—	1	—	—	—	—	1
Metal craft	1	—	—	2	—	—	—	—	—	3
Gardening	1	—	—	—	—	—	—	—	—	1
Fisheries	—	—	1	—	—	—	—	—	—	1
Sewing	—	—	—	—	2	—	—	—	—	2

Crafts

In all the schools of West Bengal craft is a compulsory subject. Only one school has indicated that craft is an optional subject and in one other school it is both optional and compulsory. In most of the schools, crafts are taught in classes 6-9. Some schools have crafts only in the 9th class, a few have in classes 9-11.

Objectives

Five objectives appear to be equally acceptable. These are: providing vocational outlet to pupils, enabling them to gain manipulative skills, inculcating dignity of labour, exploring their aptitudes and interests and making them better householders. Each of these objectives have been endorsed by 40 schools. The least acceptable objective is of offering opportunity of guided exploration and experimentation (endorsed by 16 schools). The schools indicate that the objectives are being fulfilled fairly well.

Crafts taught

The most popular craft in secondary schools of West Bengal appears to be wood work. This followed by clay modelling and embroidery. The details about the crafts taught may be seen in the table 33 given at the end.

As will be seen from the table spinning and weaving are taught only in the higher secondary and multipurpose schools. Weaving is not found in girls' schools. Wood work, metal work and gardening also are not found in girls' schools which have doll making, home crafts, embroidery, fibre craft and pottery, not taught in boys' schools.

All the schools provide only one craft to the students at one time. Only three schools have mentioned that two crafts are provided.

Most of the schools give the reason of the choice of the craft by a student as the provision of the craft in the school. Only a small number of schools (17) mention the aptitude of the students as being the basis of a selection. Very few schools have mentioned other reasons ; Parents' choice (4), teachers' choice (10) and the craft being hereditary in the family (4).

Most of the schools mention that it is not possible to change the craft in the secondary stage. Only 7 schools mention this possibility. They differ in the grade in which this change is possible—7, 8, 9 and 10 being mentioned.

Time devoted to craft work by one class in one week varies from 40 minutes to 7½ hours. The usual trend seems to be to have 1½ hours per week. The usual duration of the craft period is 40 or 45 minutes. A few schools have periods of 60, 75 or 80 minutes. More than half of the schools feel that the duration of the period is significant for craft work.

A large number of schools (44) are of the opinion that the craft curriculum is stimulating for pupils and provides scope for after-school pursuit of crafts by the students.

A very small number of schools (16) organise any field trips that are of special interest for the craft education.

Physical Facilities

Accommodation

The information about the size of the room in which craft classes are held is not clear. Some schools have interpreted it as size of enrolment in the class. However, the size of the room ranges from 200 sq. ft. to 2200 sq. ft. From the figures it appears that most of the schools have rooms of the size of 400 sq. ft. to 500 sq. ft. Most of the schools (40) feel that the room provides adequate space.

More than half of the schools have adequate facilities for storing craft products made by students and other material and supplies.

Equipment

A large number of schools are satisfied with the availability of raw-material (39), tools (38), work-benches and tables (33). Only 23 schools have adequate supply of easels and 19 schools have show cases. 43 schools feel that the materials received are adequately used.

A large number of schools (44) say that raw-materials are made available to pupils in time. In most of the schools pupils do group work as well as individual work. 32 schools mention that they provide sets of tools to individual students. It appears that usually a student shares tools with 4 or 5 other students.

Only a few schools keep the workshop open after school hours.

More than half of the schools report that they have availability of text-books and teachers' file of material. The number of schools having reference material and pupils collection is less. Only a few schools have periodicals available for craft work.

Disposal

The usual practice followed in the schools of West Bengal is to return the articles to the students. 17 schools report this practice. Only 35 schools have given information about this and may be seen that about half of these return the articles to students. 8 schools have said that they sell the articles. 8 other schools keep the articles in schools and two schools report that the articles are used in the schools.

Teachers

On the whole, as in case of other States, one teacher seems to be employed for one craft. However, there are a few schools which have no teachers for some crafts and some schools which have 2 to 3 and one school has even 4 teachers for one craft.

More than half of the schools indicate that the staff supplied to them is adequate for craft purposes. 44 schools report that the teachers have received institutional training in crafts.

35 schools report that they experience difficulty in securing craft teachers who know their subjects satisfactorily and 38 schools experience

difficulties in securing teachers who are pedagogically trained. It appears that only a few schools employ untrained and unqualified artisans for teaching crafts in school.

The following institutions provide training facilities for craft teachers :—

(1) Saroj Nathini Training School.
(2) Brahmo Training School.
(3) Vishwa Bharati.
(4) Government Training College for Art & Craft.
(5) Lady Brabourne College, Calcutta.
(6) Shivpur B.E. College.
(7) Shriniketan College Industries Training Centre.
(9) Polytechnical Institutes at Fulia, Kalyani and Shrirampore.

The grade in most of the schools for craft teachers starts with Rs. 70. In many cases it appears that there is a fixed salary. But in other cases this is from Rs. 70-150. Some schools give Rs. 80, Rs. 100, Rs. 110 and even Rs. 250. In two cases the grade is Rs. 250 to Rs. 850.

35 schools mention that the teachers follow modern practices in teaching crafts. However, only 13 schools mention that their teachers participate in community craft activities.

Evaluation

35 schools maintain record of pupils' progress. 27 schools evaluate creative ability. 19 schools evaluate technical competence and 13 schools assess quantitative turn over by pupils.

Most of the schools hold examinations in craft. All the schools seem to hold internal examinations. Usually examinations are held 3 times in a year. Some schools hold examinations once a year and a few schools three times a year. Usually schools have examinations both in theory and practice. A few schools have *viva voce* also. The range of duration of theory paper is from half an hour to three hours and the maximum marks from 20 to 100. Practical examinations are held for 15 minutes to 4 hours, maximum marks range from 25 to 100. In most cases, the minimum pass marks are 40%, some schools having 30% also. Most of the schools take craft marks into consideration for purposes of promotion. Only 8 schools have mentioned that craft marks are not considered for promotion.

Suggestions etc.

Promoting craft work

The following special features are mentioned by various schools in order to promote craft work :—

(a) Awarding prizes.
(b) Holding exhibitions.
(c) Distributing profit from crafts.
(d) Organising examinations.
(e) Organising visits to interesting places from the point of view of craft education.

Suggestions

The following suggestions have been offered by various schools with a view to promote craft education.

(1) Adequate finance to be provided (14).
(2) Raw-material and equipment to be made available (11).
(3) Trained and qualified teachers to be provided (9).
(4) More crafts to be introduced (6).
(5) Adequate accommodation to be provided (4).
(6) More time for craft work to be made available (4).
(7) More craft teachers to be employed (3).
(8) Craft workshops to be opened in all schools (3).
(9) Craft to be made compulsory. (3).

TABLE 33

Crafts followed in the Secondary School of West Bengal.

Crafts	High School			Hr. Secondary			Multi-purpose			Total
	B	G	C	B	G	C	B	G	C	
Spinning	—	—	—	1	2	—	1	—	1	5
Weaving	—	—	—	1	—	—	2	—	1	4
Clay modelling	—	1	—	—	2	—	6	2	1	12
Doll making	—	1	—	—	1	—	—	1	—	3
Drawing	—	1	—	—	2	—	1	1	—	5
Paper work	—	1	—	—	1	—	2	2	2	8
Home crafts	—	1	—	—	2	—	—	1	—	4
Technical subject	—	—	—	—	—	—	8	—	1	9
Embroidery, needle work	—	2	—	—	3	—	—	6	1	12
Wood work	—	—	—	6	—	—	25	—	4	35
Metal craft	—	—	—	3	—	—	5	—	1	9
Leather work	—	—	—	1	1	—	2	1	—	5
Wax work	—	—	—	—	1	—	—	—	—	1
Printing	—	—	—	—	—	—	—	1	—	1
Fibre craft	—	—	—	—	1	—	—	—	—	1
Tailoring	—	—	—	—	1	—	—	2	1	4
Sewing	—	—	—	—	—	—	—	2	—	2
Pottery	—	—	—	—	—	—	—	1	—	1
Gardening	—	—	—	—	—	—	2	—	2	4
Cane work	—	—	—	—	—	—	—	1	1	2

CHAPTER VI

Training in Teaching of Crafts

In the history of formal school education in India, crafts, as part of general education, are of comparatively recent origin. Some type of hand work in the form of sewing, needle work and tailoring was taught in the girls' schools even in the 19th century. In boys' schools there was no such thing as crafts but some drawing did occupy a place in the curriculum. These subjects were more or less of optional nature, however, and were not treated as organised craft work. Consequently, training for the teaching of crafts as a subject in schools was unknown until the introduction of the scheme of Basic education. This scheme for the first time drew attention to the need for systematic training of craft teachers in schools. From 1937 onwards, crafts began to be included as a compulsory subject in training institutions, preparing teachers for junior and senior Basic schools. After independence, with the acceptence of Basic education as the national pattern of education for the elementary stage, the teacher training institutions at the under-graduate level all over the country are being gradually converted to the Basic pattern. Hence training in the technical craft skills along with other methods of teaching forms a part of the regular teacher training course at the under-graduate level. At the post-graduate level as well, some teacher training institutions in every State are being run on the Basic pattern so that craft training forms a part of the regular programme at this stage also.

Apart from the regular and organised training in the teaching of crafts, imparted in the two types of training institutions there are other facilities in India for training in craft skills. These facilities are in the form of craft training institutions that are run by the Central and State Governments. But, these institutions have training in technical craft skills, and the training of teachers of crafts for schools, as their main purpose. Although sometime personnel trained in the various crafts in these technical institutions are employed by schools and training institutions for the teaching of crafts, the general experience is that for schools as well as training institutions mere technical training in crafts is not enough. At the present time there does not seem to be any coordination between the needs of the Education Departments and the organisation of these purely technical institutions.

Since the implementation of any decision regarding the introduction of craft work in schools has to be made in view of the availability of craft teachers, an attempt has been made in this chapter to survey the existing facilities in the country for the technical training in crafts as well as training in the teaching of crafts.

It is however, hoped that this chapter will give a sufficiently correct picture of the existing facilities. It also contains a few suggestions for taking the maximum benefits from the training facilities, as are being ignored or not being utilised for lack of coordination between the education department and the departments organising such training.

(A) FACILITIES FOR TRAINING IN COTTAGE CRAFTS

In a large number of States some training facilities exist for various cottage crafts*. Such facilities are mostly for those who want to enter into specific occupations after training. Almost all of these courses are organised by Industries Departments, Labour Departments or other departments which have nothing to do with the needs of the Education Departments. Again, the utter lack of coordination between the training facilities available in the various departments has led to ignorance about the institutions giving such training. Moreover, in the technical schools, controlled by the Industries Departments only preliminary training is provided to matriculates or non-matriculates and facilities do not exist in these technical schools for intensive training in crafts for qualified teachers.

(B) OTHER FACILITIES FOR TRAINING IN CRAFT AT THE LEVEL OF STATE AND CENTRAL GOVERNMENTS

Maharashtra :

In Maharashtra**, "teacher trainees teach crafts in training schools after obtaining the certificates of the junior or senior P. T. C. examinations." Formerly, some short-term courses of three or six months duration in craft work were conducted and the teachers, trained therein, taught craft in the schools. Since 1949, all the training colleges have been converted into Basic training colleges and hence no separate courses in the teaching of the crafts are run. As regards the training of personnel teaching in the training institutions, the following practice is followed :

(i) **Spinning and weaving :**

Teachers are deputed for training to institutions at Sevagram, Wardha conducted by Akhil Bharat Serva Seva Sangh, Sevagram, Wardha, and also to Khadi Vidyalaya, Tryambak Road, Nasik, conducted by All-India Khadi Commission. Secondly, the teachers who have undergone the three or six month short Term Training Courses are also eligible to teach craft in training colleges. In some cases graduates trained in the Basic training institutions are eligible for appointment as craft teachers in the training institutions.

(ii) **Agriculture :**

Persons who have passed the two year course in Agriculture Schools, run for the Field Assistants, are allowed to be recruited for teaching agriculture craft in training colleges.

(iii) **Wood-Work :**

Competent primary teachers trained in wood-work in technical schools are deputed for additional training to Government Training Institute, Aundh Camp, Poona.

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* See appendix VI. A State wise list of training facilities for cottage crafts.

** Vide D. O. No. 653—D. 2, dated 12-1-1962 from the office of the Director of Education, Government of Maharashtra.

Pondicherry :

School of Arts and Crafts, Pondicherry imparts training in crafts like carpentry, black, smithy, welding, electric wiring cum fitting, moulding and turning at the level of Junior technical school for 3 years. The school is proposed, to be converted into a Junior Technical school during 1962-63. Another institution, St. Anthony's. School of Embroidery and Needle work at Pondicherry prepares for the Madras Government Technical examination in embroidery, needle work and dress making. The duration of this course is 3 years.

Tripura

In Agaratala, Crafts Teachers Training Institute has a 12 months course for matriculates or equivalants in the crafts like, (1) Carpentry (2) Spinning and weaving, (3) Cane and Bamboo work (4) Book craft (5) Tailoring (6) Metal craft (7) Artistic textile (8) Horn and Bone work (9) Leather work (10) Paper doll making (11) Clay modelling and pottery.

Bihar

There are three Basic training Colleges, and ten Basic training schools, imparting training in crafts. The training colleges have a one year diploma course in Education and the training Schools have a two year course. The candidates are given training in the three crafts at a time, one main and two subsidiary. Nagarpara Basic Training school in the district of Bhagal pur has a one year training course in agriculture. It has the intake capacity of 30 trainees. A craft training wing is also attached to the Reformatory in Bihar which has a one year course for matriculates with two years training, or graduates with Diploma in Education, and imparts training in (i) Wood work, (ii) Leather work (iii) Metal work, (iv) Tailoring (v) Weaving (vi) Card board. Every year it trains 100 such candidates.

Punjab

Punjab has two Arts and Crafts Teachers Training Institutions. The Government Arts and Craft teachers Training Institute, Nabha was stated in Oct. 1955 at Subathu (Simla Hills) to train teachers in different crafts. In September, 1956 the institute was shifted from Subathu to Nabha. There are major crafts like wood work, Fine leather work, Clay modelling, spinning and weaving, and educational crafts like Paper cutting, card board modelling, stencilling, Linocut, Out of which the candidate is required to select one from each group. Matriculates or Higher Secondary passed students with Drawing as an elective subject are admitted for the training which lasts for two years. In all 40 students are enrolled every year. The Institution of Arts and crafts Teachers Training for women at Patiala has drawing and painting, and needle work (drafting and cutting) as two compulsory subjects. In addition to these, training in one of the major crafts like leather work, plastic work, knitting, embroidery, spinning and weaving, and, one of the minor crafts like card board is imparted. After finishing this course of two years, duration the candidates are appointed as Junior Teachers.

Rajasthan :

In addition to the Basic Training Schools imparting training in the crafts like spinning weaving, clay modelling, gardening and cardboard, sufficient to teach primary school clildren, Vidya Bhawan

Handicrafts Institute at Udaipur has one year 'certificate' course and two years diploma course to train teachers in handicrafts. It is attached to the Rajputana University and the Diploma holders are eligible for teaching High school classes. Teaching of Arts and Painting is a Compulsory subject. Weaving, spinning, wood work, leather work, paper mache, card board work, metal work and tailoring are the crafts out of which one has to be selected by the Candidate. One hour per day is devoted to the hobby class. There is a handicraft school at Parasaram wara with a training course of 10 months duration imparting training in any one of the crafts like spinning & weaving, tailoring, clay modelling, wood work, Card board and Paper work to 100 students every year. The High school passed students get a certificate after finshing the training. The state also has Rajasthan Mahila Vidyalaya at Udaipur, an institute which is for women only. Though there is one year certificate course as well as a two year Diploma course it imparts training only in sewing and tailoring. The Diploma is the minimum qualification for the Handicrafts teachers of Rajputana Government Training Course. Lower secondary school examination certificate holders are eligible for a one year certificate course and High school or Higher Secondary School leaving certificate holders for the two year Diploma Course. The institute has an intake capacity of 30 pupils.

Gujarat

Gujarat has Pre-Primary Training Institutions, Primary Training Institutions and Government and non-Government Training Colleges, imparting training in crafts like Spinning & Weaving, Kitchen gardening and agriculture, and Card board modelling & Wood work. The primary teachers are deputed to Training Colleges for training in Kitchen gardening and agriculture, alongwith the teaching of other subjects. The teachers who pass the Primary school certificate examination receive training for two years, while teachers who pass the S. S. C. examination receive training for one year for Junior Course, and for two years for senior course. The Craft is the same and the same quota of work in Craft is to be completed, whether the trainee is completing the two year Course or one year course. Each trainee has to weave 10 sq. yds. of cloth and has to spin yarn from cotton, required for weaving the cloth. Gujarat Vidyapeeth, Ahmedabad has a special institute for training in crafts only. Lok Seva Mahavidyala, Sanosara—Bhavnagar, a Rural University has a Post-Basic Course of 3½ years duration. This Course, which is recognised, by the Education Department of Gujarat, as equivalent to B. A. degree, has (1) Agriculture & dairying (Krishi Gopalan). (2) Social rural Educatein (Lok Shikshan). (3) Village and Cottage Industry (Gram-Grah Udyog). as optional subjects out of which one is to be selected. A section attached to the University has a special course of two years' duration for training in Agriculture Science & Dairying and the successful students are recognised by the Agriculture Department of the state government, as being at par with Krishi-Vids. It has a Basic Primary Teachers training section for 40 pupils with spinning & Weaving as the basic craft.

MYSORE

All the Government or private Teachers Training Institutions in the state, whether Basic or non-Basic have facilities for imparting training in crafts, and enabling every teacher to have a working skill and knowledge of at least three crafts, after the completion of training. The students of Basic training institutions have to select one main craft and two auxiliary crafts, and the students of General Training institutions have to select three auxiliary crafts. Out of these three, two can be offered for the final examination. The Crafts are, gardening, paper work, card board, drawing and painting, spinning and weaving, music, home science and needle craft and clay modelling. The syllabii for the main and auxiliary crafts are different. Also, the students are not permitted to take the allied crafts as the main and auxiliary crafts.

UTTAR PRADESH

In Uttar Pradesh, Government Constructive Training College, Lucknow, imparts training in the Crafts like, agriculture, ceremics and science, industrial Chemistry and science, book-craft and printing technology, metal craft, wood craft and spinning and weaving to 50 pupils every year. This training is of the L.T. standard and the duration of the training for agriculture, ceremics and science, and Industrial Chemistry and Science is for one year. In the Government College of Home Science at Allahabad, training in House Craft is imparted to 35 women candidates every year. Under the reorientation scheme, to meet the expansion need of Craft teachers, a Government Craft Training Centre at Pratapgarh has been opened, which imparts training of about 12 to 15 months duration in agriculture and of about 6 months' duration in other Crafts to 100 trainees at a time. The trainees are usually deputed teachers in-service, or pre-service.

In addition to this, there is a Basic Training College at Varanasi and Junior Basic Training Colleges, at Allahabad, Lucknow and Muzaffarnagar. There are some normal schools which also give some sort of Craft Training. Crafts in which training is imparted in these institutions are as follows :—

Basic Colleges :

Main Crafts.

(a) Spinning and Weaving (Allied Arts)
(b) Agriculture and Allied Arts.
(c) House Craft (for women) and Allied Arts.

Subsidiary Crafts

1. Spinning and Weaving of Durries etc:—(for those who do not offer spinning and weaving as main craft.)
2. Gardening and Vegetable Culture:—(for those who do not offer agriculture as main craft).
3. Tailoring (for those who do not offer house Craft as main Craft).
4. Toy making and pottery.
5. Fruit preservation and Soap making
6. Raffia, basketry and Cane work.
7. Leather Work
8. Wood Work

Normal Schools :

I Agriculture
II Horticulture
III Wood Craft
IV Metal Work
V Spinning and Weaving
VI Leather Craft

VII Dying and Calico printing
VIII Tailoring
IX Paper Mache Work
X Basketry and Cane and Raffia Work
XI House craft (for girls only)

BOMBAY

In Bombay there is a Handicrafts Teachers' Training College run by the Arts & Crafts Education Society. The College* offers the following three types of courses :

(1) The Artisans Courses in Handicrafts;
(2) The Craft Teachers Certificate Courses;
(3) The Primary Teachers Course in Crafts.

In the Artisans courses in handicrafts, which are recognised by the All-India Handicrafts Board, Government of India, Ministary of Commerce & Industry, crafts such as—(i) cane & bamboo work; (ii) card-board work & book-binding; (iii) carpentry; (iv) clay work & pottery; (v) cloth printing & dyeing; (vi) leather work; (vii) metal work; (viii) tailoring & cutting; (ix) toy making (soft & wooden ; and (x) weaving (hand-loom), —are taught. The duration of the Course is about 11 months. A diploma is awarded at the end of the term. In the Craft Teachers Certificate Courses, recognised by the governments of Maharashtra & Gujarat, nine courses of instruction are included. These relate to cane work, card-board work and book-binding, carpentry (wood work), leather work, tailoring & cutting, bamboo work, cane & bomboo work, metal work, hand-spinning & weaving. A student can take one or more of the above Crafts and offer for the examination. For each craft, he has to fulfil certain conditions of minimum attendance viz. 5 hrs. attendance per working day if the course is—to be completed in one session and 2½ hrs. attendance per working day if the the course is to be completed in two sessions. Primary, Secondary or Montessori trained teachers are eligible for this course. The Primary Teachers Courses in crafts include paper folding, paper cutting, paper crumpling, simple paper flowers, garlands, crepe paper flowers, use of 'waste', simple weaving on card-board loom, clay work, card-board & straw-board work, and miscellaneous training in the preparation of marble papers, paste, glue, chalk sticks, etc. The course is of 4 months duration and a certificate is awarded at the end of this period.

ORISSA

In Orissa the status of craft and craft teaching is described as follows : *"In the Basic schools craft teaching is a compulsory part of the school programme. In the senior Basic schools it is examinable by assessment. Regular training is being given to the teachers of Basic schools, while they are under training, in at least three crafts, viz., gardening, spinning and weaving. The teaching is done by trained graduates or other Craft Instructors who have had special training in crafts either at Wardha or at Koni. At present, gardening, spinning and weaving are the three main crafts in the Basic schools of Orissa. It is under contemplation to introduce carpentry, bee-keeping and horticulture as additional crafts. The matter is still under consideration.

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*The details of the various courses are available from the Director of Technical Education, Maharashtra State, 3-Cruckshank Road, Bombay-1.

*Vide note of D.P.I. Orissa, sent with his D.O. No. 95, dated 11.1.1962.

"In the Basic schools one of the trained matriculates is put in charge of craft teaching as there is no special provision for appointing a craft teacher as such in the senior or junior Basic schools. But the teacher who handles craft-teaching is a trained hand proficient in the skill of imparting knowledge as well as necessary technique for the teaching of the crafts named above. In all the Basic Training Schools there is special provision for the teaching of the above three crafts and extensive areas have been acquired for gardening and agriculture. Necessary implements and other facilities are provided so as to enable the students undergoing training to get adequate facilities to acquire the knowledge and skill required for craft teaching. We have at present six Basic training institutions for matriculates who desire to be Basic teachers; and in all these six institutions the State Government have made adequate provision for craft teaching in spinning, weaving and gardening. The basic qualification for recruitment as craft teacher in any school is Matric Basic Trained. There are no special craft teaching institutions, as such, for the Basic schools. These Basic training schools are meeting the requirements of the State of Orissa so far as the junior and senior Basic schools are concerned.

"In the non-Basic schools at the primary level spinning and gardening are two important crafts which have been introduced since the year 1952. Under the scheme of 'Orientation of Primary Schools towards the Basic Pattern, which is being implemented this year, it is expected to provide various other crafts like—agriculture, clay-modelling, mat-making toy-making, paper-pulp work in the Upper Primary schools and in classes VI-VIII which correspond to the Middle School the following crafts are to be introduced: tailoring, rope-making, carpentry, weaving, smithy, sewing and needle-work, and working with machine tools... ...As regards the teachers, necessary provision is being made in the normal Training Institutions (Elementary Training Schools) for the teaching of craft to the prospective teachers and these crafts vary from gardening and agriculture to carpentry, weaving, spinning, tailoring at present. To give a technological bias to the training programme it is intended to provide craft training in machine tools. Besides the 80 normal Training Institutions for primary school teachers we have a number of technical institutions in the State under the administration of the Industries Department which produce technicians in carpentry, shoe-making, weaving, tailoring and other useful crafts. The candidates who come out successful from these training institutions are appointed as craft-teachers in their respective trades in Middle, English and High Schools where craft has been introduced recently. Since teachers are not readily available for all the schools craft teaching has been made optional so far. But it is gradually being introduced in almost all the Middle, English and High Schools. Matriculation is treated as the basic general qualification for admission to the teaching profession in the Basic schools and non-Basic Middle and High Schools. But as regards the non-Basic primary schools which are about 20,000 in number, we have to rely on the Middle-passed Elementary Trained teachers with just a little craft training plus required orientation courses which he will be compelled to attend periodically."

MADRAS

In Madras,* Manual Training section is attached to the Teachers College Saidapet giving training for two academic years in wood work and for one academic year in weaving. Apart from the craft instructors' course in the Teachers' College, Saidapet, there are 14 arts and crafts schools for women under the Industries Department and one L.P.N. Institute, Ratchanyapuram, Madurai District, under the control of the Education Department. In 1957-58, the craft instructors' courses was related to wood-work and weaving. The L.P N. Institute provides special training in crafts like weaving, home craft, pottery making, toy-making & basketry.

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*Report on Public Instruction in the Madras State for the year 1957-58.

Central Government

The need for the training of craft instructors has also been realised by the Central Ministry of Labour. The Advisory Committee on Technical Training which was set up by the Labour Department of Government of India, in their meeting in 1944, recommended the introduction of a scheme of training craftsmen for industry on a national basis. The Committee drew pointed attention to the shortage of instructors and recommended that their training must be an urgent and indispensable feature of the scheme for training craftsmen. The All-India Council for Technical Education endorsed this recommendation in April, 1946 and a Conference of Labour Ministers of Provincial (now State) Governments decided that a central institution for training instructors should be set up. In pursuance of this decision, the Central Training Institute for Instructors was established in April, 1948 at Koni (Bilaspur) in Madhya Pradesh. The main objects of the Central Training Institute are* :—

"(i) to provide a course of theoretical and practical instruction in various trades and in the art of teaching to Instructors employed in Government or private institutions and establishments ;

(ii) to train new Instructors who could meet the needs of existing institutions or of those to be started under the development plans of the country ; and

(iii) to provide a refresher course for Instructors so that they could always remain up-to-date in the knowledge of their trades and keep themselves familiar with the latest methods of production as well as teaching."

There are now about 5 to 6 such institutions in the country.

The Central Education Ministry wanted to utilize the opportunities offered for instructors training for the purposes of training teachers for craft teaching in the schools. At their instance, therefore, the Central Institute at Koni (Bilaspur), agreed to start separate special courses for the training of teachers in the crafts required in schools and training institutions. Accordingly State Departments were advised to send teachers for training in craft to this Central Institute but for some reason this arrangement did not prove to be successful.

In addition to the above facilities, the Basic Education Committee of the Khadi and Village Industries Commission, which met at Sewagram in 1957, decided that craft refresher courses should be arranged by the Education Departments of the States, with the help of the Khadi and Village Industries Commission for those trained in the Basic education institutions. Two years later the Committee resolved that the State Governments may be requested to give a definite and agreed upon plan for the vocational training of Basic school teachers. The Commission has brought out two very valuable pamphlets : (*1*) *Assistance to Basic Institutions* ; & (*2*) *Training in Khadi and Village Industries*. The second pamphlet gives full information regarding the types of training courses devised by the Commission. It would also be possible to work out some sort of arrangement with other Central agencies and authorities like Small-scale Industries, All-India Handicrafts Board, Extension Training Department of the Ministry of Food and Agriculture, etc., for the training of craft teachers required for the schools and training institutions. Some sort of coordinated effort and initiative are necessary.

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* Central Training Institute for Instructors, Koni—Bullettin for General Information ; 1955.

(C)

TRAINING FACILITIES AT THE LEVEL OF REGULAR TEACHERS TRAINING INSTITUTIONS RUN ON BASIC LINES

(1) Training facilities for the teaching of crafts in the training institutions at the under graduate level.

Crafts form an important part of the curriculum of teacher education for the elementary school level. The aims of teaching crafts in these institutions reveal the purpose and scope of this subject. In the syllabus prescribed for Maharashtra and Gujarat for their junior and senior certificate in teaching, the aims are stated as follows :

"(i) To enable the students to understand intelligently all the processes involved in the craft from raw-materials to finished products ;

(ii) to enable the students to handle the equipment, maintain it carefully, do minor repairs or replacements when necessary and set up apparatus ;

(iii) to acquire skill in artistic production of articles prescribed in the syllabus ; and

(iv) to enable the students to correlate the knowledge gained in the craft, theory and practice with the academic subjects taught in schools."

The same syllabus sets out the objectives of teaching auxiliary or subsidiary crafts in the following statements :—

"In Basic schools, where education is to be imparted through life, the needs of life will touch upon more than one craft and, as such, auxiliary crafts are included in the curriculum of Basic training institutions. The auxiliary crafts selected will serve as complements to the basic craft. The objectives of including auxiliary crafts will be to give the trainees the fundamentals of a related craft at a lower level. enable the trainees to see their relation to the basic crafts or the life of the people, and give them mastery over some of the fundamental processes in the practice of the auxiliary crafts. Such crafts will provide the trainees richer opportunities of correlating academic knowledge with them."

In the syllabus for Delhi the aims of teaching paper and card-board work have been stated as follows :—

"(i) To create a taste for making simple and beautiful things ; (ii) to develop in the trainees a love for decorative designs ; (iii) to enable them to realise the value of handwork ; and (iv) to enable the trainees to correlate the knowledge gained in crafts with other subjects of the school."

The crafts offered in the various syllabii for teacher training at the under-graduate level have been listed in table 34 below :—

Table 34

State	Main Crafts	Subsidiary Crafts
Andhra	Spinning & weaving gardening, Agriculture, Woodwork, Leather work, Pottery/Clay modelling, Tailoring, Cardboard work, Metal work.	Paper making, Bee keeping, Poultry farming, Mat weaving, Needle work, Fibre and Grass work, Basketry, Soap-making.
Assam	Spinning & Weaving, Gardening.	Bee keeping, Sewing and Needle work, Cane and Bamboo work.
Bihar	Spinning & Weaving, Gardening & Agriculture, Woodwork, leather work, Tailoring, Card-board work, Metal work, Needle work.	Sericulture, Poultry farming and Pisciculture, Mat Weaving, Basketry.
Maharashtra & Gujarat	Spinning & Weaving, Agriculture, Wood work & Cardboard work.	Gardening, Card-board work, Mat work, Needle work, Home craft.
Delhi	Spinning & Weaving, Agriculture & Horticulture, Woodwork, Card-board work and paper work, Metal work, Home craft.	
Himachal Pradesh	Spinning & Weaving, Gardening.	Wood work, Card-board work, Bee-keeping, Poultry farming, Soap-making.
Jammu & Kashmir	Spinning & Weaving, Agriculture, Wood work including card-board work, Home craft.	
Kerala	Spinning & Weaving, Agriculture & Gardening, Wood work, Leather work, Pottery & Clay work, Paper & Card-board work, Metal work, Palm-leaf work, Needle work and embroidery, Basketry (Any one from the each group).	

State	Main Crafts	Subsidiary crafts
Madhya Pradesh	Spinning and Weaving, Gardening, Agriculture.	Wood work, Leather work, Pottery/Clay modelling, Tailoring, Card-board work including paper work.
Madras	Spinning & Weaving, Gardening, Agriculture, Kitchen work.	Leather work, Pottery and clay modelling, Tailoring, Card-board work, Metal work, paper making, Bee-keeping, Poultry farming, Mat-weaving, Needle work, Fibre and Grass work, Basketry, Soap-making.
Manipur	Spinning & Weaving, Gardening, Woodwork, Pottery, Clay Modelling, Tailoring.	
Mysore	Spinning & Weaving, Agriculture, Wood work with paper and card-board work, Home Craft.	Gardening, Leather work, Card-board with paper work.
Orissa	Spinning & Weaving, Gardening, Agriculture, Wood work, Card-board work, Metal work.	
Punjab	Spinning & Weaving, Gardening, Wood work, Home Craft.	Leather work, Pottery and clay modelling card-board work, paper making, bee-keeping, poultry farming.
Rajasthan	Spinning & Weaving, Home Craft.	Gardening, Agriculture, Wood work, Pottery/clay modelling and paper mache, tailoring, card-board work.
Uttar Pradesh	Spinning & Weaving, Gardening & Horticulture, Agriculture, Wood work, Leather work, Tailoring, Metal work, Basketry, Cane and raffia work, Home craft, Dying and calico printing, Paper Mache work.	
West Bengal	Spinning & Weaving, Gardening.	Card-board work, Paper work and leaf weaving, Poultry farming.

It will be seen from the above table that practices for prescribing main crafts and subsidiary craft vary. In all the syllabii taken together nearly 40 different crafts are stated. The most common ones are spinning, weaving, gardening, agriculture, paper work, card-board work (including book binding), wood work (including toy making) and home craft. Following these come clay modelling, leather work, metal work, tailoring, needle work and work in a variety of local materials such as fibre, grass, leaves, bamboo, cane, willor, raffia and coir. Basket-making and mat weaving are included in this category. Some syllabii provide for activities like bee-keeping, poultry farming, pisciculture, and dairy farming. Only a few syllabii provide for sericulture, dying and printing, soap-making, paper mache, masonry, foundry, lead and wire work, oil pressing, or the making of "gur", pickles, "chatneys", "murabbas", etc.

Some of these crafts are prescribed separately as well as in combinations. Common combinations are : spinning and weaving ; gardening and agriculture, horticulture and agriculture ; paper work and card-board work ; card-board work and wood work ; tailoring (or sewing) and needle work ; basketry and cane and raffia work ; bamboo and cane work. In some cases, paper work, card-board work and wood work are all combined to form one course.

(2) Training facilities for crafts at the Post-Graduate level

Crafts form an important part in the training of Basic school teachers even at the post-graduate level. Usually two or three crafts are prescribed by all the syllabii although the practices differ slightly from State to State. The general trend seems to be to train each teacher-trainee to teach two crafts—one called major and the other subsidiary. In a few institutions no distinction between major and subsidiary crafts is made and there are compulsory and optional crafts.

The crafts taught to pupil teachers in post-graduate Basic training institutions are listed State-wise in table 35 below :

Table 35

Crafts To taught Pupil-teachers in Post-graduate Basic Training Institutions

Name of State	Crafts taught
Andhra	(i) Cotton ; (ii) Gardening.
Assam	(i) Spinning ; (ii) Agriculture & Gardening ; (iii) Carpentry ; (iv) Sericulture ; (v) Smithy.
Bihar	(i) Agriculture ; (ii) Wood-work ; (iii) Textiles ; (iv) Card-board ; (v) Spinning ; (vi) Drawing & painting ; (vii) Leather work ; (viii) Photography.
Delhi	(i) Spinning & weaving ; (ii) Vegetable farming ; (iii) Card-board modelling ; (iv) Wood-work.
Gujarat	(i) Spinning & weaving ; (ii) Kitchen gardening ; (iii) Card-board work.
Himachal Pradesh	(i) Spinning & weaving ; (ii) Agriculture ; (iii) Wood work ; (iv) Leather work ; (v) Art & painting.
Kerala	(i) Cotton craft ; (ii) Agriculture ; (iii) Wood work ; (iv) Card-board work ; (v) Book-binding ; (vi) Bee-keeping ; (vii) Bamboo work ; (viii) Mat weaving.

TABLE 35 (Contd,)

Name of State	Crafts taught
Madhya Pradesh	(i) Agriculture ; (ii) Spinning & weaving ; (iii) Wood work ; (iv) Horticulture ; (v) Fret work ; (vi) Clay modelling ; (vii) Card-board work ; (viii) Paper work.
Madras	(i) Cloth craft ; (ii) Agriculture.
Maharashtra	(i) Spinning and weaving ; (ii) Vegetable gardening and Agriculture ; (iii) Paper work and Card-board modelling.
Mysore	(i) Spinning and weaving ; (ii) Wood work : (iii) Card-board modelling.
Orissa	(i) Wood work ; (ii) Agriculture ; (iii) Spinning and weaving.
Punjab	(i) Spinning and weaving ; (ii) Agriculture ; (iii) Wood work; (iv) Drawing and Painting; (iv) Leather work ; (v) Clay modelling ; (vi) Card-board work.
Rajasthan	(i) Spinning and Weaving ; (ii) Agriculture ; (iii) Card-board and Paper cutting ; (iv) Wood work ; (v) Leather work ; (vi) Clay modelling.
Tripura	(i) Agriculture ; (ii) Spinning and weaving ; (iii) Carpentary ; (iv) Basketry ; (v) Music or art.
Uttar Pradesh	(i) Agriculture ; (ii) Home Science ; (iii) Spinning and weaving ; (iv) Tatpatti weaving ; (v) Gardening and vegetable culture (vi) Tailoring (vii) Toy making and pottery (viii) Fruit preservation and soap making (lx) Raffia-Basketry and cane work (x) Leather work.
West Bengal	(i) Spinning and weaving ; (ii) Cane work ; (iii) Bamboo work ; (iv) Coir work ; (v) Carpentry ; (vi) Paper work ; (vii) Card-board work and book-binding ; (viii) Metal work ; (ix) Agriculture ; (x) Needle craft ; (xi) Mechanical Drawing ; (xii) Music (xiii) Decorative arts.

There are a variety of major and subsidiary crafts. The above table names about 35 crafts that are provided in different States by various training institutions. The crafts most generally taught include spinning and weaving, agriculture and wood work as major crafts and card -board modelling, leather work, tailoring and horti-culture as subsidiary crafts. Other crafts less frequently taught include seri-culture, smithy, metal work, book-binding, bee-keeping, bamboo work, mat weaving, fret making, paper work, wood turning, basketry, home science, coir work, needle craft, fruit preservation and soap making and toy making and pottery.

The theory of craft work is also taught and in many syllabii a certain percentage of total marks in craft work are specially assigned for

TABLE 36

Special Craft Training Institutions or Wings attached to the teachers training Institutions

State	Institutions	Crafts in which training is imparted	Duration of Course	Total No. of Seats	Minimum qualifications for admission	Type of Certificate awarded	Remark: if any
Bihar	Craft training wing attached to Reformatory.	Wood work, Leather work, Metal work, Tailoring, Weaving, Card Board.	1 year	100	Matriculation with two years training or Graduation with Diploma in Education.	Certificate	
Gujarat **A.**	1. Lok Bharati Sanosara Bhavnagar	Agriculture and dairying as main craft. (Krishi Gopalan)	2 years	30	Matriculation or Post Basic Final passed	Certificate	The successful candidates are recognised as Krishi Vids.
B.		Social Rural education Village Cottage Industries (Gram Grah Udyog).	3½ years	40	,,	Degree of Post Basic Course.	Called Snataka equivalent, to B.A.
C.	Basic Primary section.	Spinning and Weaving	—	40	,,	Diploma	Basic Teachers Diploma
	2. Gujarat Vidyapeeth, Ahmedabad.	Spinning and Weaving.	—	—	—	—	—
Madras	Manual Training Section, attached to teacher's college, Saidapet.	Wood work, Weaving	2 academic years for wood work.	16	Post matriculation or S.S.L.S. completed		
			1 academic year for weaving.	25			

State	Institutions	Crafts in which Training is imparted	Duration of course	Total No. of Seats	Minimum qualifications for admission	Type of certificate awarded	Remarks if any
Maharashtra (Bombay)	Handicrafts Teachers Training College	**(i) Artisans Course**	11 months	65	Matric.	Diploma	
		Cane and Bamboo work. Card-board work. (Book binding) Carpentry Clay work (pottery) Cloth printing & Dyeing, Leather work, Metal work, Tailoring and cutting, Toy making (soft wood) Weaving (hand loom)	11 months	65	Matric	Diploma	
		(ii) Craft Teachers Certificate Course Cane work, Cardboard work, Carpentry (wood work), Leather work, Tailoring and Cutting, Bamboo work, Cane and bamboo work, Metal work, Hand spinning and weaving,	5 hrs. per working day to finish it in two sessions. 2½ hrs. per working day to finish it in 2 sessions.		Primary, Secondary and Montessori trained Teachers or Teachers deputed by any recognised primary or secondary school—provided he/she has put in one year service as a teacher.	Certificate	
		(iii) Primary Teachers' Training Course.	4 months				
		Paper folding, Paper cutting.					

State	Institutions	Crafts in which Training is imparted	Duration of Course	Total No. of Seats	Minimum qualifications	Type of certificate awarded	Remarks if any
		Paper crumpling, Simple paper flowers and garlands, Crepe paper flowers, use of waste (match box and corks) Simple weaving on card board looms, Clay work, Card board and Straw board work To prepare Marble papers Paste glue chalk sticks etc.				Certificate	
Punjab	(i) Government Arts and Crafts Teachers Training Institute, Patiala (for women)	**Cempulsory subjects:** Drawing & painting, Needle work (Drafting and cutting) **Major Crafts.** Leather work and Plastic work, Knitting and embriodery, Spinning and weaving, Laundry Dyeing and Printing Metal work. **Minor Crafts.** Card board,	2 years	50	Matriculation (second class) with Drawing as one of the subjects	Diploma	

State	Institutions	Paper Crafts in which Training is imparted	Duration of Course	Total No. of Seats	Minimum qualifications	Type of certificate awarded	Remarks if any.
		cutting, Stencilling.					
	(ii) Govt. Institute of Arts & Crafts, Nabha.	**Crafts.** Wood work, Fret work, Leather work, Plastic work, Clay modelling, Spinning and Weaving. **Educational Crafts.** Paper cutting, Card board modelling, Stencilling, Lino cut.	2 years	40	Matriculation or Higher Secondary with Drawing as an elective subject.		
Rajasthan	(i) Rajasthan Mahila Vidyalaya Udaipur	Sewing and Tailoring	(a) 1 year	30	Lower Secondary school examination certificate.	Certificate	The diploma is the minimum qualification for the teachers of Rajasthan Training Course.
			(b) 2 years		High School or Higher Secondary school leaving certificate.	Diploma	
	(ii) Vidya Bhawan Handicrafts Institute Udaipur	**Compulsory Subjects.** Painting and Arts.	(a) 1 year		High School Certificate	Certificate	The course is attached to the teachers training course of Rajputana University.
		Subsidiary Crafts. Spinning and weaving, Wood work, Tailoring Leather work,	(b) 2 years	50		Diploma	

State	Institutions	Crafts in which Training is imparted	Duration of Course	Total No. of Seats	Minimum qualifications	Type of certificate awarded	Remarks if any
		Card board work, Paper mache., Metal work.					
	(iii) Handicraft School Parasramwara.	Spinning and weaving, Tailoring, Clay modelling, Paper work, Wood work, Card board work.	10 months	120	High School	Certificate	
Tripura	Craft Teachers' Training Institute, Agartala.	Carpentry, Spinning and weaving, Cane and bamboo work, Book craft, Tailoring, Metal Craft, Artistic textile, Horn and Bone work, Leather work, Paper doll making, Clay modelling and Pottery.	12 months	40	Matriculation or equivalent.		
Uttar Pradesh	(i) Govt. Constructive Training College, Lucknow.	Agriculture ceremics Science Industrial Chemistry and Sciences, Book-Craft and Printing Technology, Metal craft, Wood craft, Spinning and weaving.	1 year	50		Training of the L.T. Standard	

State	Institutions	Crafts in which Training is imparted.	Duration of Course.	Total No. of Seats.	Minimum qualifications.	Type of certificate awarded	Remarks if any
	(ii) Govt. College of Home Science, Allahabad (for girls)	House Craft	1 year	35			
	Teacher's Training Centre Pratapgarh.	Agriculture and other crafts.	12 to 15 mths. in Agriculture. 6 mths. in other crafts.	100	Teachers in service or pre-service Training		Under Re-orientation to meet the expansion need of Craft Teachers.

theory. The time devoted for the practice and teaching of craft as well as the standards of achievement maintained in respect to quantity, quality and money value differ among the institutions. The time a pupil-teacher devotes to craft work generally varies from 1½ to two hours per day although in some institutions it is as low as ⅔ of an hour or as high as 2½ hours per day. Data on this point are not adequate for exact generalisations. It may be a useful subsequent study to collect detailed data on these aspects and thereby suggest optimum standards of achievement for craft work.

(D) SOME RECENT TRENDS

In some States the trend in respect to the training of craft teachers appears to be towards opening special craft wings or departments attached to teacher training institutions. In Bihar a special wing for training teachers in crafts has been attached to the Reformatory School, Hazaribagh, and training is imparted here in carpentry (wood work), paper and card-board work, weaving, tailoring trade, leather work, cane and bamboo work, metal blacksmithy and tin smithy, dyeing and printing and also some aspects of the electricians' trade. The Bihar State Seminar on Primary Education held in October, 1961 in Patna made a proposal for the conversion of at least one senior training school in each division into a training centre for craft. The Teacher's College, Saidapet, Madras, already has a special craft instructors course. Similarly, it is understood that Madhya Pradesh has recently started a craft teachers training section in the Post-Graduate Basic Training College at Bhopal. Rajasthan has a special handicrafts teacher training institution run by the Vidya Bhawan Education Society at Udaipur. Punjab has two arts and crafts teachers training institutions one at Patiala (for women only) and the other at Nabha. Uttar Pradesh has a strong department at the Constructive Teachers' Training College Lucknow. It is reported that Tripura too has a Craft Teachers Training Institution at Agartala. State-wise list of such institutions alongwith the crafts taught, duration of the course and the yearly intake of students by each of them is given in Table 36.

The above facts indicate that training facilities for craft teachers exist in three types of institutions :

(a) Institutions run by the Industries Department or Vocational Training Institutions ;

(b) Teacher training institutions under the control of the Education Departments of the States ;

(c) Special craft training institutions or wings attached to the teacher training institutions for training of teachers in crafts under the control of the Education Departments. Some of such institutions are listed in the Table 37 given below.

In a large majority of junior and senior Basic schools craft is usually taught by teachers trained in the Basic teacher training institutions at the under-graduate and post-graduate levels. In some secondary schools in a few States teachers trained in Basic training colleges are employed for the teaching of crafts. Basic teacher training institutions, however, do not seem to be the main source from which they get their craft teachers. In our questionnaire sent to the secondary schools one question requested them to state the names of the institutions in which their craft teachers had been trained. The institutes reported in response to this question have been listed as part of the State report in Chapter V b. Since it may be helpful here to see from where the secondary schools are, at present, actually drawing their craft teachers, the training institutions reported by the schools in the different States are listed below State-wise.

TABLE 37

State	Institutions from which craft teachers are drawn by secondary schools.
Andhra	1. Jnior Techical Schools at Sikandarabad, Nallapalli. 2. Government Technical Schools at Naredplli, Hyderabad, Mashirabad. Rajahmundhari. 3. College of Fine Arts, Hyderabad. 4. Allauddin Technical School. 5. Khadi Neul Muslieen, Kachiguda. 6. Government Polytechnics, Department of Technical Education, Vocational Institute, Ramganj. 7. Markasi Madursa. 8. Weaving Institute. 9. Vivek Vardhani Training College of Tailoring, Hyderabad. 10. Ambar Charkha Training Centre, Hyderabad. 11. Village Industries. Centre. Hyderabad. 12. Home Science College, and Multipurpose schools, teachers colleges, teachers training schools, Basic training colleges, arts and crafts schools and Khadi Gram Udyog, Hyderabad.

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* Based on the replies received from secondary schools.

TABLE 37. (Continued)

State	Institutions from which craft teachers are drawn by secondary schools :
Bihar	(1) Basic Training Schools ; (2) Sarvodaya Training Centre; (3) Teacher's Training College; (4) Nag ar para Basic. Training school (Bhagalpur); (5) Craft training wing attached to Relenualort school Hazari bagh.
Gujarat	(1) Gujarat Vidyapeeth, Ahmedabad; (2) Vallabh Vidyabhawan, Bochasan; (3) Chimanbai Udyog School, Bawda; (4) Kalawani Mandal, Balasinor; (5) Government B. T. College, Rajpipla; (6) Stri Mandal, Surat.
Kerala	(1) Industrial Training Institute, Khadi Board; (2) Industrial Training School; (3) Government Training Institute, Beypose; (4) Occupational Institute, Trichur; (5) Post-Graduate Basic Training College, Trichur: (6) Basic Training Schools; (7) Ramvaran Technological Institute, Trichur.
Madhya Pradesh	(1) Industrial Training School, Bilaspur; (2) Soap-Making Training Institute, Indore; (3) Gardening Training Institutions; Indore; (4) Kala Niketan, Jabalpur; (5) Vocational High Schools, Jabalpur (also at Khandwa and Raipur); (6) Government Basic Training College, Jabalpur; (7) Prantiya Shikshan Mahavidyalaya, Jabalpur; (8) Home Science College, Jabalpur.
Madras	(1) Lady Willingdon Institute for Craft, Madras; (2) Government Teacher's College, Madras; (3) Government Technical Institute at Coimbatore, Madras and Vanaspet; (4) Textile Institute, Madras; (5) Arts and Crafts School, Mumbakenar; (6) Government Textile Institute, Coimbatore; (7) Industrial Institute, Vidnolaklsam.
Maharashtra	(1) Handicrafts School-Akola; (2) Industrial Training Institute-Amravati; (3) Government Basic Training College, Amravati; (4) Handicrafts Teacher's Training College, Bombay; (5) J. J. School of Arts, Bombay; (6) Elphinstone Technical High School, Bombay; (7) Government Industrial Training Institute, Nagpur; (8) Cottage Industries Training School, Nagpur; (9) Vocational High School, Nagpur; (10) Khadi Gramodyog Mahavidyalaya, Nasik; (11) Industrial Training Institute, Oudh; (12) Institute of Modern Art, Poona; (13) Khadi Gramodyoga Mahavidyalaya; (14) Bhartiya Kala Parsarani Sabha; (15) Buldana School of Carpentry.
Mysore	(1) Krishna Rajendar Silver, Jubilee Technological Institute. Bangalore. (2) Agricultural colleges at Bangalore. Dharwar and Behhal; (3) Government

	Basic Training Centres; (4) Department of Industries and Commerce; (5) Department of Horticulture; (6) Polytechnic institutions.
Orissa	(1) Institutions at Angul, Bahrampur, Balanjir, Narsinghpur, Nayagarh, Sumbalpur, Sundargarh and Phoolbund; (2) Sewing Tailoring Institute, Puri; (3) Poor Cottage Industries, Cuttack; (4) Orissa School of Engineering; (5) Krishi Maha Vidyalaya, Bhubneswar; (6) Craft Tailoring Centre, Mayurbhanj.
Rajasthan	(1) Vidyabhawan Handi-Crafts Institute, Udaipur; (2) S. T. C. Schools; (3) Institutions of Social Welfare Departments; (4) Industrial Training Institute; (5) Sir J.J. School of Arts, Bombay (6) Jamia Millia, Delhi; (7) Bilaspur Crafts Institute, Bilaspur. Government Craft school Parasram dwara, Jaipur.
Uttar Pradesh	(1) Junior Teacher Training Institutions; (2) Training colleges; (3) Extension Teachers Training Institutions at Partapgarh, Gorakhpur and Rudarpur; (4) Wood work Institute, Lucknow; (5) Constructive Training College, Lucknow; (6) Arts and Crafts Centre, Lucknow; (7) Central Wood Work Institute, Allahabad; (8) Carpentry School, Allahabad; (9) Pedagogical Institute, Allahabad; (10) Art Training College, Allahabad; (11) Drawing and Handicrafts Centre, Allahabad; (12) Weaving and Spinning College, Varanasi; (13) Refresher Course Training College, Pratapgrah; (14) Home Science Training College; (15) Government Central College, Kanpur.
Himachal Pradesh	(1) Government Basic Training School, Solan; (2) Government Basic Training School, Rajpura (Chamba) U. P.; (3) Government Basic Training School, Nahan. (4) Government Basic Training School, Bilaspur (H. P.)
West Bengal	(1) Saroj Nathini Training School; (2) Brahmo Training School; (3) Vishwa Bharati; (4) Government Training College for Arts & Crafts; (5) Lady Brabourne College, Calcutta; (6) Shivpur B. E. College; (7) Shriniketan College, Industries Training Centre; (8) Polytechnical Institutes at Fulia, Kalyani and Shrirampore.

It is clear from the above table that the secondary schools are at present drawing craft teachers from a large variety of institutions including technical schools, art institutions, polytechnic departments, specialised craft institutes, industries departments, home science colleges, Basic training colleges, private centres such as Sarvodya Training Centres, Khadi Gramodyog, Vallabh Vidyabhawan, etc., occupational or vocational Institutions, technological institutes, agricultural colleges, departments of industries and commerce, department of horticulture, school of engineering and institutions of social welfare departments. We have no information which can indicate how far the training offered by these various types of institutions is suitable for secondary school craft teachers. The need for a careful study of the syllabii of these various institutions and of the coordination between the Education Department and the agencies organising such institutions is obvious.

The decision to introduce craft teaching in elementary and secondary schools necessitates an adequate supply of well trained craft teachers. Teaching of crafts requires not only the usual professional knowledge about the theory, principles and techniques of teaching but also special technical knowledge of the crafts, being taught. The lack of adequately qualified teachers has affected the progress of craft instruction in schools not only in India but in many other countries where craft is adopted as a school subject.

Various ways and means have been adopted to overcome the shortage. In various countries one or more of the following have been tried : (i) Giving further technical training in crafts for a year or so to practising teachers who are already professionally trained, (ii) appointing diploma holders from industrial or vocational schools, or from arts and crafts training centres to teach handicrafts and subsequently giving them regular professional teacher training or arranging special short-term professional courses during vacations or holidays : (iii) appointing an artisan or craftsman to teach crafts for a period during which a trained teacher works with him as an apprentice; (iv) Incorporating the theory and practice of crafts as an integral compulsory part of the usual courses of teacher training.

The position of craft teacher training in some of the countries of the world is summarised as follows in the Geneva Report on "The Teaching of Handicrafts in Secondary Schools," (1950, pp. 25-26).

"Different ways of meeting the more or less transitional lack of qualified teachers, have been found.

One way, followed in India (Madras and Central Provinces and Behar), and Switzerland (Geneva and Zurich), is to organise supplementory technical courses for trained teachers. In the Union of South Africa (Cape Province and the Orange Free State), students wishing to take up handicrafts are required to take a one-year specialist course after their teacher training course. In Austria, there are technical and practical further training courses at the academy of plastic arts in Vienna. In Holland, class teachers themselves in most cases teach handicrafts, after obtaining the necessary official permission.

Further training courses in handicrafts, organised for secondary teachers, and taking place in the holidays, also go some way towards meeting the need for both technical and professional qualifications.

Certain countries mention supplementary technical courses—but give insufficient details as to what degree of preliminary teacher training is required.

In Australia, Ceylon, Egypt, India (West Bengal), New Zealand, Panama and Thailand, it is common practice to appoint diploma students from industrial, arts and crafts, and other specialist schools, to teach handi-crafts. Handicraft teachers for Argentinian secondary schools are to receive the same training as teachers for the vocational and technical schools.

In Canada (Ontario)l England and wales, Finland, France and the Union of South Africa (Natal), craftsman are sometimes appointed to teach handicrafts at secondary level. There are special courses for them in England and Wales; in Finland they are required to have a certain minimum of teacher training, and in France to pass a preliminary test.

In Austria, England and Wales, France and Switzerland (Basel city), general secondary teachers who have taken handicrafts as a special option in their diploma examination, may be appointed to teach the subject.

In Switzerland (Neuchatel), handicrafts are usually taught by specialist teachers who have passed a certificate examination that includes a test of their teaching ability, but they are not required to possess a teacher's certificate.

It is of particular interest that there are two special training centres for handicrafts teachers in Denmark, which all normal school students wishing to specialise in the subject must attend. In Norway, similarly a national school of handicrafts and drawing was established in 1938.

In some countries, facilities for specialist training do not yet exist, and handicrafts are then taught by class teachers with ability and liking for the subject."

CHAPTR VII

Administrative Aspects

The Assessment Committee on Basic Education in 1956, while making its observations regarding the need for a suitable administrative set up, said : "Give us good administration and we will give you good Basic schools." This statement holds true to a large extent in the case of effective organisation of any aspect of education. Administration has an important role to play directly as well as indirectly in making things function effectively. In craft education the role of administration involves planning concrete and clear objectives of the introduction of crafts at various stages, preparing well thought out graded syllabii or curriculum in craft work, preparing guide and reference books for the teachers of craft at various school levels, providing an adequate number of suitably educated and trained teachers for craft work, arranging for timely and adequate supplies of suitable raw-materials to schools, providing adequate craft equipment and workshop and building facilities for the day-to-day craft work and the storage of raw-materials and finished craft products. In addition to the above, administration must provide suitable supervisory or inspectorial personnel in order to see that the schools' craft programme is maintained and improved in all its aspects. The fact that a supervisor or inspector is incharge of an area having a number of schools, means that his varied experiencs can help to coordinate and enrich the craft methods and programmes in the individual schools.

An attempt was made in the present study to gather information about the existing administrative practices in respect to craft from the different State Departments of Education. Information was received from only 6 States and hence is quite inadequate. It is reported below however under several heads for whatever it may be worth.

Budget

No provision was reported of a separate budget heading for crafts. The State Departments generally replied that they do not make any separate provision for craft education in their educational budget. Gujarat, however, stated that it set apart 1.3% of the total educatinal budget for craft work in schools.

Accommodation

The State Departments of Education were requested to indicate formula, if any adopted by them, regarding the provision of accommodation for craft work per school, and the percentage of schools in each State which actually had accommodation according to the prescribed formula. The information received from the States is as follows :

Assam

There is no specification laid down regarding accommodation. Information regarding the actual accommodation facilities is not known

Bihar

Though there are no specifications laid down for accommodation yet 25% of the Junior & Senior & Basic schools and 10% of the primary & middle non-Basic schools have special accommodation for teaching of crafts.

Gujarat

The specification for accommodation laid down for craft work in Basic schools is as follows : For agriculture 5 acres of land and irrigation facilities are provided. For other main craft sheds of 30'x18' are provided. In respect to middle or senior Basic schools, the question of accommodation as a whole is acute in urban areas, and therefore. craft-cum-classroom adjustment is permitted. The accommodation for agriculture in post-Basic schools or 'Iokshalas' as they are called, is prescribed at the rate of not less than 25 acres of land. The allotment of a particular course is made only to schools meeting this accmmodation requirement.

Madhya Pradesh

There is no specific accommodation available for the erafts in Junior & Senior Basic schools. Crafts sheds are provided in Higher secondary and Multipurpose schools.

Madras

The specified accommodation for craft work in junior, senior and post-Basic schools is about 15 sq. ft. per pupil and in non-Basic schools about 9½ sq. ft. per pupil. Information is not available regarding the actual accommodation facilities in the schools.

Maharashtra

Craft sheds of the dimension of 30'x18' are built in some large senior Basic schools. The number of such schools is small.

Rajasthan

There is no specification laid down for the accommodation for craft work in schools of Rajasthan. Even the percentage of schools having any type of such accommodation is not known. In some schools separate room is alloted for the craft work if and when is considered necessary.

Uttar Pradesh :

For Basic primary schools no accommodation specifications are laid down for craft work. For wood craft and weaving in senior Basic schools accommodation is provided according to the number of students. For tailoring craft no accommodation has been specified. In high and higher secondary schools separate rooms are specified for tailoring, metal work and leather work. The size of the rooms depends upon the strength of students. It is reported that almost hundred percent of the schools have the specified accommodation facilities for wood work, weaving, metal and leather work.

West Bengal :

There are no specifications regarding craft accommodations in junior Basic schools where a classroom itself is changed into a craft class. In senior Basic schools one room is allotted for each craft. The recommended space per student is 15 sq. ft. and almost all schools meet this recommendation. The specifications for craft accommodations in higher secondary schools and multi-purpose schools are the same as for senior Basic schools i.e., one room for each class with the area being calculated at the rate of 15 sq. ft. per child. The actual accommodations provided in higher secondary schools is not mentioned but in the case of multipurpose schools the specified accommodation has been provided in all schools. In post-Basic schools and in public schools one room is also allotted for each craft.

Himachal Pradesh

There is no specific formula laid down for the accommodation for teaching of crafts in Basic or non Basic schools. What ever accommodation is available, is used.

It is apparent form the above that the specifications laid down by the various State Departments of Education are different. In some States standard sizes of craft classes or craft sheds have been evolved whereas in other States, the craft accommodation is calculated according to the number of children in the class. The rate for such calculations is 15 sq. ft. per child for Basic schools in West Bengal and Madras. It seems clear that this aspect of the administration of craft work needs more attention and formulae need to be evolved -for the provision of accommodation for different crafts and for schools of different levels. This observation is supported by the fact that while giving their suggestions for improving craft work, 101 schools suggested that more space for craft work should be provided.

Equipment for Craft work

By and large it appears to be common practice for the Education Departments to provide craft equipment to the schools. Some secondary schools reported that some of the students possess their own sets of tools. This does not seem to be a common practice in any of the states. As regards the specifications laid down in this respect by the Departments some of the information received is as given below :

Andhra Pradesh

No formula has been devised for calculating craft equipment needs and individual schools are authorised to purchase their own equipment. In some multi-purpose schools pupils are required to bring their own materials and are given the finished products in crafts like cooking and tailoring. Usually the previous year's purchases are used for the current year and the current year's purchases are reserved for the following year. For repair of craft equipment no contingent fund is made available to schools. The private multipurpose schools, however, reserve some grant for this purpose. Generally the schools make their own arrangements for the repair of craft equipment.

Eqiupment tor craft work

Assam

The equipment for the craft work is supplied by the Education Department, according to the number of pupils. When the total number of pupils exceeds 100 it is supplied for only so, the reason being that at one time, only 50% of pupil are supposed to be doing craft work, while the other 50% remain busy in some other work. In actual practice only one third of the schools are supplied with craft materals.

The schools usually get their equipment in time. The work of the repair of the craft tools is entrusted to the local recognised firms or workshops and the expenses are met out of the contingency funds, by the schools. There is no help of any kind available from the neighbouring schools in this respect.

Bihar

The arrangements for getting the craft equipment is generally made by the schools themselves and the equipment is usually recieved late due to the want of funds. As there is no contingency fund, the cost of repair work is met out of the fund for raw-materials. There is no govt. agency or school workshop for getting the repair work done and thus it is done in the local market by the individual schools.

Although the above information is inadequate to warrant any generalisation about the country as a whole, it does indicate the need for a systematic study of the procedures being adopted in the States and of their experiences with these procedures. Such a study would be of undoubted value in evolving effctive ways of calculating the equipment needs of schools of different levels for different crafts, procedures for supplying the equipment to the schools and for making arrangements for its timely repair.

Gujarat

In respect to craft equipment the position in Gujarat is similar to that in Maharashtra. In Basic schools the equipment is supplied by the Education Department. However, pupils in Basic schools are persuaded to purchase their own spinning wheels. Individual non-Basic middle schools make their own purchases as equipment expenditure is subject to grants and is not to be borne by the Government in full. (Non-Basic middle schools are usually non-Government schools). It is reported that the schools usually get the equipment in time. The repair of equipment is arranged for by individual schools. For equipment repair payment is made from general grants rather than separate contingent grants. Workshop facilities are not available for repair of craft equipment.

Madhya Pradesh

There is no special formula for caluclating equipment needs of the schools in the State. It is generally supplied by the Department of Education in time. Contigent funds are provided and all the expenses for repairs are met out of that. There is no arrangement in school. for the repairs of the tools, and it is got done in the local workshops

Madras :

Equipment required for cloth craft for a junior Basic school having five grades is at a rate of Rs. 300/- per teacher. The equipment is supplied by the Department in case of junior and senior Basic schools. For secondary schools the Education Department sanctions the grant.

The repair of craft equipment is arranged by the school managements and the expenditure is met from the general contingent fund.

Maharashtra :

Specifications are laid down for the equipment required for introducing each of the following crafts : wood work, agriculture and spinning weaving in various classes of the elementary stage i. e., classes I to VII and it is reported that almost all schools have got the specified equipment. The procedure adopted is that the needs of the particular schools are assessed by the Aministrative Officers of the school-boards who then place the order for equipment with the Village Industries Board, Bombay. The grants for expenditure in crafts are sanctioned by the Government. Generally the schools get equipment in time but in a few cases when the Village Industries Board is over-loaded the equipment comes to the schools rather late. For the repair of craft equipment the schools are authorised to employ local artisans and a contingent grant is given to the schools for this purpose. Neighbouring schools sometimes help one another in the repair of craft equipment.

Rajasthan

The Department of Education gets the requirements of Junior and Senior Basic schools, and Multipurpose high school from their headmasters and makes arrangments for the timely supply of the equipments. 80% of the Junior Basic schools and 75% of the Senior Basic schools as well as Multipurpose schools are well equipped. Non Basic, Primary & Middle schools get only 10% of the total equipment required by them and the rest is brought by the students themselves. However the infomation supplied by one of the Traninig Colleges is quite ontradictory, according to which the supply of eqiupment is done by the inspectorate for Junior & Senior Basic schools as well as primary and middle schools. The Institutional heads of High schools, higher secondary schools and Multipurpose schools are authorised to make purchases themselves. Generally the supply is delayed, some times even by eight months due to certain financial technicalities.

As far as the repair of the tools goes only Junior Basic schools get funds, while others usually do not get them. It is usually done by the schools and the schools help each other in that.

Again a contradictory report is given by the traininig College that no funds are allotted at the primary stage but instead Rs. 50 per year are allotted at the secondary stage for repair work. Schools with wood work as craft have a workshop for the repair work.

Uttar Pradesh :

For agriculture work in Basic primary schools a one to three-acre farm is mentioned as the requirement while for a middle or high higher secondary school a farm of 3 to 10 acres and a bullock, if necessary, are mentionod as requirements. It is reported that all the schools have the prescribed equipment for craft work. In Basic primary and senior Basic schools equipment is supplied by the Department through Interim Zila Parishads and it is usually supplied in time. In the case of equipment for secondary schools the Department authorises the Government schools to make their own purchases. Other recognised secondary schools purchase equipment from their own funds.

As regards the repair of craft equipment no contingent fund is supplied to Basic primary schools. In senior Basic schools or junior high schools a contingent fund of Rs. 60/- per annum for wood craft, weaving and other craft is made available. For agriculture the repair of equipment, etc., is paid for through the sale of farm produce. In government high and higher secondary schools the allotment of funds for equipment repair is made according to the strength of students.

Other recognised high and higher secondary schools make their own provision for repair of craft equipment. All the schools are required to get the tools repaired themselves. There is no separate external agency created for this purpose. It is also mentioned that workshop repair facilities are not available in individual schools nor do the neighbouring schools help one another in this respect.

West Bengal

Lists of equipment to be supplied to schools for different crafts have been standardised and the quantitative requirement of equipment is determined according to the type of work and the number of students. In the case of junior Basic schools the equipment is supplied by the Department. All other schools purchase the equipment themselves. For the repair of equipment some contingent fund is made available according to needs. Generally each school makes its own arrangements for repair but sometimes the equipment is sent to other workshops.

Himachal Pradesh

Without any specific formula, generally the craft tools are either purchased by the Inspector of schools or heads of the institutions, in accordance with the craft, selected by them, out of those prescribed by the department. The schools usually get this equipment in time. The sanctions are conveyed as soon as proposals for purchase are received from the field. No specific provision is made in the budget for the repairs of craft equipment. The provisions made under contingencies are however utilised for such repairs. It is done by the District Inspectors of schools or by the schools themselves. The schools have no workshop facilities thus the question of help by the neighbouring schools does not arise.

Raw-Material for Craft Work

An attempt was made to get information about the way the different States calculate the raw-material needs of the schools and the degree to which raw-materials were actually supplied according to the prescribed formula. The information as received from six of the States is summarised below:

Andhra Pradesh

No formula has been devised for calculating the raw-material needs of individual schools. The Department authorises individual schools to make their purchases. In some multi-purpose schools the pupils bring raw-meterial in case of some crafts like cooking and tailoring, Raw-materials purchased during the previous year are used for the current year.

Assam

A quota for each school in each craft is fixed in the beginning of the school session and supplied to the schools by the authorities concerned. The fixation of quota is made with due regard to the funds placed at the disposal of the authority. All the Basic schools receive raw-materials. The Departmental heads of each locality supply the raw materials in time, generally in the begining of the year in February or March.

Bihar

There is no regular formula for the supply of raw materials. All schools made their own purchases according to their requirements, and it is usually done in time in the beginning of the session.

Gujarat :

In Basic schools the cotton for craft work is supplied by the Education Department according of the following formula :

1½ pounds in standard III
1½ pounds in standard IV
3 pounds in standard V
3½ pounds in standard VI
4 pounds in standard VII

While the Department generally supplies raw-materials, schools are sometimes authorised to purchase the material themselves. For non-Basic schools which are not Government managed the formula for calculating needs of raw material and the supply of the raw-material is determined by the respective school managements. The Department makes the purchase of raw material during the period February to March and these purchases are utilised for the next year. The raw-material is usually supplied to the schools in time. The requirement of raw-material to multi-purpose schools is determined according to the needs of individual schools and the schools purchase the raw-material directly. In post-Basic schools the raw-material needs are determined as per provision made in the budget and the individual schools purchase raw-material themselves.

Madhya Pradesh

The raw-material is generally supplied in time by the department to all the schools in the beginning ef the school session.

Madras :

The requirement of raw-material per school is determined according to the average number of pupils in each grade and according to the production targets per student as specified by the Department. All the schools get raw-material according to these standards. The cotton for cloth craft is supplied by the Department when the school requires it.

Maharashtra :

There is no special formula for calculating the raw material needs for individual schools. Roughly one to two rupees per pupil for cotton craft and Rs, 5/- for wood work are sanctioned. Almost all the schools receive the raw material on the above basis. The administrative officers of the District school Boards purchase raw material (cotton) in open bazaar form cotton growing parts of the district or from other districts. The individual schools are also allowed to purchase the raw-material locally if it is not supplied by the District school Boards. Purchases of raw material are made at the beginning of the session and the matarial is supplied to indivdual schools in time.

Rajasthan

According to the information received from the Director of Primary and Secondary schools, Rajasthan, the need of the Raw material per school is calculated keeping in view the strength of the boys, (calculated by groups), local need, market value and the budget. Usually the department supplies it just in time in the beginning of the school session, that is in the months of July and August except in the case of Higher Secondary schools, where it is purchased by the pupils themselves according to the approved list by the Inspector of Schools. The supply is received according to the formula by all the Junior Basic Schools and Multipurpose Schools, 10% of the non-Basic Primary and Secondary and Senior Basic Schools and 50% of the Higher Sscondary Schools. However, the information received by one of the Training College indicates that raw-material is usually supplied by the inspectors of schools in the case of the schools at the Junior and Middle stages and purchased by the heads of the institutions in the case of schools at Secondary stages. It is supplemented by the students in all the three stages. There is no special formula laid for the supply of raw-material. It is usually supplied during the months of December to March and is thus delayed by 5 to 8 months due to financial technicalities.

Uttar Pradesh

For Basic primary and junior high schools a lump-sum grant per school is given through the Interim Zila Parishad and this body makes arrangement to supply the raw-materials according to the needs of individual schools. In middle classes attached to, Government schools there is a specific provision for raw-materials in the budget. The recognised non-Government schools make their own arrangements according to the requirement. The raw-material is supplied usually in time although delay occasionally results from procedural difficulties. The raw-material is supplied usually in the first or second month of the year. In the case of high and higher secondary schools purchases are made by the schools themselves from the funds supplied by the Department. Students are not required to bring their own raw-materials.

West Bengal

It has been reported that the amount of raw-material needed in a year is calculated on the basis of jobs planned for the year. The individual schools make their own purchases of raw-materials and thus get them in time. These purchases are usually made at the beginning of the academic session.

Himachal Pradesh

The Heads of the schools and the District Inspectors make the purchases of raw-material in accordance with their requirements. The individual schools get their requirement in time as the sanctions are conveyed immediately on receipt of proposals. The Institutional Heads and the District Inspectors of schools are asked to send their proposals early in the session. There is no fixed period for the supply or purchase of raw-materials and it is purchased as and when it is required.

It is obvious from the above accounts of States that some States adopt systematic criteria or basis for the supply of raw-material but on the whole it seems necessary to evolve some effective procedures for the same. Among the suggestions given by the secondary sehools for promoting improvement of craft work 86 schools comment on the need for adequate and timely supyly of raw-materials.

Disposal of the Finished Product of Craft Work—Utilisation of Income from it.

An essential corollary to the introduction of craft work in schools is the disposal of the finished products of craft work and the utilisation of income from it. The effective utilisation and ready disposal of craft products is essential for reasons such as the following :—

1. It provides stimulus for producing good finished articles and

hence acts as a check on unsystematic and shabby craft work.

2. It provides a psychological satisfaction to the children involved in the production of the articles when they realise that their goods have demand.
3. It can help the individual schools or the Education Department in recovering some part of the expenditure, incurred on craft education.

These reasons pertain largely to the economic aspect of craft work. They do not deny, however, its educative value and this of course is the main reason for their being introduced in the school. This is never disputed. Some economic gain can result for the systematic organisation of craft work and this helps in ensuring the systematic and scientific practice of craft work.

Information received from some of the States regarding the procedures adopted for the disposal of finished products and the facilities available in the schools for storing the finished articles is as follows :—

Andhra Pradesh

In junior and senior Basic schools almirahs and boxes are supplied for the storage of finished craft products. For the disposal of craft products the position has been reported as follows :

Junior Basic Schools :

1. Hanks are given to Khadi Board ;
2. Vegetables are taken away by pupils.

Senior Basic Schools :

The craft products are sold in the industrial exhibition.

High Schools :

1. Products are sold in the annual school fairs and/or given away as prizes in sports.

Multipurpose Schools :

1. The sale of finished products is organised.
2. Previously the products were used for supplying the National Cadet Corps with funds and refreshments. But since there is no budget for refreshment now, this practice has been stopped.
3. Articles prepared from cloth ; vegetables and food products are taken away by the pupils.

In junior and senior Basic schools the factors determining the sale price of finished products are :

1. Recovery of the cost ;
2. Market value.

In high schools the sale price is the cost of the raw-materials used.

The Department has some economic expectations from sale of craft products in Basic schools but not in other schools.

The income from the disposal of crafts products is utilised in junior Basic schools for children's welfare ; in senior Basic schools for supplying fodder for cattle ; in high schools for the purchase of craft equipment and improvement of the Department ; and in multi-purpose schosls for the improvement of craft department. The actual average income from the disposal of craft products in junior Basic schools is reported to be about Rs. 15/- per school. In respect of a typical senior Basic school it is reported to be Rs. 90/- from the 'khadi' craft and Rs. 200/- from agriculture.

The craft products are kept in the respective schools till they are disposed. The finished products are sold according to the market value in the neighbouring villages, in consideration with the quality of the things produced. The management has economic expectations from it. Enough attention is paid to better production, and better education. In most cases the returns are deposited in the treasury.

Bihar

The finished goods are stored in schools. As far as the disposal of these goods is concerned, they are either sold to the pupils or to the teachers of the schools for their personal use, or are sold locally. The price is calculated, according to the cost of raw-materials, establishment charges plus labour charges of the students. The schools have no economic expectations out of it. The income goes out to the Government treasury in the case of Government Institutions and to the management in the case of private schools. Actual income depends on the total number of students and the nature of the craft.

Gujarat

The way craft products are stored and disposed of in the schools of Gujarat is almost the same as in the schools of Maharashtra. It is also mentioned that on the sale of 'khadi' a rebate of 25% is granted to pupils and teachers over and above 19 naya paise of Central Government rebate. In the case of multi-purpose schools it is reported that the sale price of finished products is determined by local market price. The average income per school from craft work in case of Basic school has been reported as follows :

Spinning and Weaving	...	Rs. 28.87
Kitchen gardening and agriculture	...	Rs. 124.93
Card-board and wood work	...	Rs. 72.89

Madhya Pradesh

Though the management has no expectations from the sale of the finished products, which is generally done in the local markets, the returns in the case of Government institutions is credited to the Government Treasury.

Madras

The schools are provided equipment for the storage of finished products through the Khadi Development Department. The prices of such products are prescribed by the Khadi Development Department. The expectations from craft of spinning and weaving in Basic schools have been reported as follows :

Grade III	...	20 hanks per pupil

Grade IV	...	20 hanks per pupil
Grade V	...	30 hanks per pupil
Grade VI	...	40 hanks per pupil + 4 sq. yds. of cloth
Grade VII	...	40 hanks per pupil + 6 sq. yds. of cloth

The net income from craft work is given to the management of the schools for providing clothing and food to the school children and for equipment.

Maharashtra

For storing finished craft products the schools are provided with tins and wooden cup-boards. For the disposal of these products the following steps are taken :

1. Pupils are encouraged to purchase 'khadi' produced in schools.
2. Efforts are made to sell the finished products.
3. Government officers are requested to purchase their stationery requirements from schools.

In determining the sale price of finished products, the cost of raw-materials, as well as labour and depreciation charges are taken into account. The Department expects to recover through the sale of craft products, the expenditure on raw-materials as well as labour and depreciation charges. The money recovered is credited to the primary education fund. The average income from the disposal of craft product per school has been reported as follows :

Spinning & Weaving	...	137 %
Agriculture	...	165.5%
Wood work	...	143.7%

Rajasthan

The finished craft products in the case of Junior Basic Schools are stored in the Craft rooms. The Non-Basic schools give them to the students if the material is brought by them, other wise the things are consumed by the Department itself. Some times some useful things are sold and the cost is fixed by adding 25% of the cost of the material to the actual cost. The Department does not expect any economic returns which comes to hardly 2% which is credited to the crafts account.

As stated by one of the training colleges, the students and teachers get a further concession of 12½%.

Uttar Pradesh

The yarn from spinning is stored in boxes. In middle or junior high schools the products of craft work are stored in a room or in small godowns in the school.

As regards the disposal of finished products the yarn is usually given to the khadi bhandars. Cloth and other articles are usually given to the students but sometimes sold for nominal prices. The farm produce is partly distributed among the students and partly sold in the market. The sale price of finished products is generally fixed at the cost of the raw-materials utilised. In the case of farm produce the prevailing market rates are approved. While crafts are taught as a subject and not with any profit motive some profit is expected from agricultural farms and from spinning and weaving. From Basic primary schools there is no income in cash. In middle and secondary schools the income from craft is deposited in their accounts and purchases and other necessary expenditure are made out of it. In Government schools the income from craft materials is deposited in Government account. The income from the sale of agricultural farm produce of senior Basic schools is deposited in the school account and is utilised for the betterment of the school farm etc. The income varies from school to school.

West Bengal

The finished craft products are stored in a godown. For their disposal meals & exhibitions, etc. are arranged. Articles are purchased by the students as well as by the people in the neighbourhood. The prices of finished products are fixed according to the price of raw-materials and the wages of the students as determined by the number of hours devoted to the production. In the case of junior and senior Basic schools, the Department expects some economical return from craft work and income from the disposal of craft products is deposited in the treasury. Until very recently the Government directed schools to use money from the sale of craft products for school meals and uniforms.

Himachal Pradesh

The produced goods are stored in the school stores and are put to an open auction. The sale price is fixed by adding cost of the wear and tear of the machinery to the actual cost of raw material. The schools usually have no economic expectation.

In accordance to the recommendations of the 3rd meeting of the All India Council for elementary Education held on the 19th and 20th of October, 1959 that the profits accuring from the craft produce of the school children should be utilised for their benefits, all reciepts from the sale of craft materials is credited to the council fund and thereafter each school draws money and utilizes it for the benefit of the children.

It is clear from the above descriptions that the facilities provided for the storage of finished craft products, policies regarding the economic expectation from craft work and methods adopted for the disposal of craft products vary considerably among the various States. The States have given information regarding the economic returns in different units. Some, as in the case of Maharashtra, have stated returns in terms of percentage of the expenditure on raw-materials, as well as labour and depreciation charges recovered. Some States have reported the economic return in terms of money for each craft and some have in terms of hanks of yarn and yards of cloth. It is thus very difficult if not impossible to form any comparable ideas about the economic returns from craft products in the various States.

Supervision and Inspection of Craft Work

In order to ensure that the schools get the physical facilities like accommodation, raw materials, and equipment as well as craft teachers in time and according to the crafts prescribed in the schools, regular check through some supervisory machinary seems to be essential. Supervision is also needed to ensure the effective practice of craft in the schools. Two types of supervision are generally needed-supervision of the day-to-day working of the craft activities and periodical or occasional supervision by some higher and presumably more competent authorities who can also act as a liaison between the schools and the education departments. Our information with respect to the supervisory practices comes again from twelve States only.

In Assam, day to day supervision of craft work in Primary schools is done by the sub-Inspectors of schools, trained in tha Post Graduate Basic Training College. In Madhya Pradesh this supervision work is done by the Assistant District Inspectors of schools in case of Junior and Middle schools and by Dy. Directors af education in case of Secondary schools. In rest of the states it is generally done by the craft teachers and the headmasters of the respective schools.

The practice in respect to supervision or inspection of craft work by some competent authority at the level of the Education Department, varies from State to State. In Andhra, there is no particular arrangement for inspection in craft. It is reported that Deputy Directors and Deputy Education Officers inspect the schools in general.

In Assam the sub-Inspectors of schools of the sub-Divisional Head Quarters Supervise the craft work along with Inspection of schools—twice a year. Also the craft members from the Basic Training centres supervise and inspect the craft work in some of the Basic schools. There is a supervising Inspector for Basic schools who is incharge of craft, supervision of the craft side in Basic schools in the whole Sub-Division.

In Bihar, there is no separate inspecting staff for craft work, The general inspecting staff also inspects craft teaching There is one craft inspector for the whole state who gives craft guidance. In the secondary and Multipurpose stage there is a system of craft teaching by expert teachers.

In Gujarat, for Basic schools, the Assistant Deputy Educational Inspectors who have taken some Basic education course, are appointed to supervise and inspect craft work; and for non-Basic primary schools, Assistant Deputy Educational Inspectors are in charge of the supervision and in middle Basic schools Deputy Educational Inspectors inspect craft work along with other work of the schools. In high schools, higher secondary schools and post Basic schools Deputy Educational Inspectors or Educational Inspectors are entrusted with supervision.

Madhya Pradesh

Inspection and administration of craft-work in Madhya Pradesh is done by Assistant District Inspectors of schools.

In Rajasthan the supervision and Inspection of craft work at the level of education department is done by the Inspectors of schools. While inspecting and supervising the craft work of the secondary stage themselves, the Inspectors get the work of the Primary schools, inspected by sub Dy. Inspectors and that of Middle schools done by Dy, Inspectors.

Delhi

There are no special craft Inspectors. In Delhi the Inspection and supervision at the level of state Department is done by Inspectors of schools.

In Maharashtra some Assistant Deputy Education Inspectors trained in craft work supervise and inspect the craft work in primary and middle schools.

In Madras, the craft work of junior Basic schools is supervised by the Deputy Inspectors of Schools and the Regional Craft Supervisor. In non-Basic/primary schools and senior Basic schools the Deputy Inspector of Schools is expected to supervise craft work along with other activities of the school. In non-Basic middle schools and high schools, the District Education Officer has this responsibility.

In U. P. at the primary and middle stage some members of the District Inspecting Staff such as a Sub-Deputy Inspector of Schools or a Deputy Inspector of Schools do the supervision work. In high schools the supervision is done by the District Inspector of Schools and the Assistant Director of Education (Basic). It is reported that many of these officers have been giving in-service training in crafts and that there is a scheme for giving such training to all the officers.

In West Bengal no arrangements exist for the supervision of craft work at the level of the Education Department.

From the above it is evident that generally there is no provision for separate personnel to supervise and inspect craft work. A more effective organisation of craft work would arrange for some personnel to spend full time in supervision and improvement of craft practices in the school. In this respect the example of the United Kingdom might well be followed. There craft supervisors in different regions see to it that the schools have the facilities necessary for the organisation of craft work and that the day-to-day craft practices are organized systematically and scientifically. In addition these supervisors give guidance to the craft teachers, make their experience of different schools available to all the schools in their regions, and organise seminars, refresher courses and in-service training courses. Occasionally, national seminars are also organised where the experiences of the different regions are exchanged.

In addition to the administrative aspects discussed above there are other things for which the Education Department has to be responsible. Among these additional responsibilities are :

Syllabii Preparation :

A perusal of the various syllabii for different levels of schools of the various States leaves much to be desired. Some of the striking limitations of our existing syllabii seem to be :

(i) The absence of a very clear statement of the objectives of craft education in functional terms ;

(ii) Absence of a well worked ont functional targets of achievement for the different grades ;

(iii) Lack of clear instructions about the number of crafts to be taken up by a school and the practice of craft work in the schools ;

(iv) Inadequate instructions about the mode of conducting examinations in craft work, the different aspects to be taken into consideration while assessing the craft work and the weightage to the given to each of these aspects.

In the light of the above observations about the craft syllabii it may be appropriate to invite the attention of the State Departments to the need for their revision. Only, recently craft is being introduced at all levels of the Indian school system. The possibility of introducing new crafts suitable to the local needs and availability of raw-materials may also be explored. Systematic experimental studies will have to be undertaken in different States for evolving graded syllabii for such new crafts.

Literature on Crafts :

At present there seems to be a dearth of suitable literature on various crafts. Steps should be taken to produce reference books, source materials and guide-books for craft teachers of various levels and for different crafts. Suitable literature on the various crafts needs to be produced also for the children of different levels.

Training of Craft Teachers :

Another important responsibility of the Education Departments is to make available to the schools suitable craft teachers with adequate educational background and training. At present there are Basic training colleges and schools which give some training in craft work. It has to be seen how far this training is adequate for purposes of teaching crafts effectively in the schools. In addition to the training colleges there are other craft training facilities being sponsored by Government as well as non-Government agencies. Detailed account of the existing training facilities in India is given in Chapter V. But it may be worthwhile to mention here that there is an urgent need for the State Departments to survey and assess the existing craft training facilities in the respective States and to coordinate their programmes with the needs of the schools at various levels, The syllabii of the different training institutions should also be scrutinised and, if necessary, revised.

CHAPTER VIII

CRAFTS TEACHING IN SOME OTHER COUNTRIES—U. K., U. S. A., U. S. S. R.

I. U. K.

Historical Perspective

Handicraft was first introduced in England, as early as 1940 for girls only in the elementry schools. According to the revised code of 1862, needle work was made a compulsory subject for girls and schools were required to reach certain standards in this as well as other prescribed subjects before they could qualify for the receipt of a grant. In the year 1880, the scope of needlework was expanded and called "domestic economy". Domestic economy was a highly organised course and included such specific studies as rules of health, the management of a sick room, cottage income, expenditure and savings, food—its composition and nutritive value.

For boys no hand work was made obligatory until the year 1890 when drawing was introduced as an obligatory subject in schools for older scholars. Meanwhile instruction in wood craft, known as manual training, was beginning to develop. The fullest and most enlightened conception of this subject was to emerge on the continent, in Sweden specially, and from there it spread to Great Britain and on across the Atalntic. Manual training was first given official recognition in England in the year 1890 when the Commission on Elementry Education Acts recognised, in its recommendations the need for introducing systematic courses in handicrafts or manual training for boys corresponding to the needle work and other practical work for girls. After 1890 technical education (arts & craft) spread rapidly in England and wood work was recognised by the Education Department as an elementary school subject. In 1890 the Art and Science Department laid the following conditions for mannal training classes to qualify for the grant :

1. The instruction must be allied to drawing, i. e., the work of the pupils must be done from drawings to scale previously made by them.
2. The instruction must be carried on continuously throughout the school year for two hours weekly. The two hours might include 1½ hours for drawings made in connection with the practical work.
3. The work is to be done with tools in ordinary use in handicrafts in wood or iron and in properly fitted workshop wholly devoted to the purpose.
4. Time devoted to handicraft must be in addition to the 20 hours per week prescribed as a minimum for the instruction in the compulsory subjects of the Code of the English Education Department.

At the beginning of the 20th century some minor revisions were again made in the scheme of manual work in the schools. In 1905 the overall hand work scheme was as follows :

Upto 8 years	—	Kindergarten work
From 8 to 10 years	—	Paper cutting and folding, paper and cardboard modelling with clay or plasticine, drawing with pencil and crayon, brush work, introductory needle work.
10 to 12 years	—	as above but developed and applied. (also where possible ; boys—light wood work ; girls—elementary needle work.)
12 to 14 years	—	boys—wood work proper, plastic modelling, gardening ; girls—needle work, cookery, laundry work, housewifery, gardening.
14 years and over (higher grade and continuation schools)	—	as above but more advanced ; for boys—metal work and science handicraft.

In the 1920's the scope of handicraft in elementary schools began to widen. In addition to a specific and basic course in hand work or domestic science it was considered worthwhile that boys and girls be given the opportunity to experience as wide a range of other practical activities as the circumstances of the school permitted- Suggested activities included gardening, practical science, book-binding, basket making, weaving, knitting, carving and for boys some handman's courses as prescribed in the books for Boy Scouts.

A great majority of secondary schools had only one craft viz. wood work. Metal work could not be introduced in many schools because it necessitated a second workshop.

Present Position

Infant and junior schools :

Practical work is well established in infant and junior schools. In the junior schools the pressure of the selection examination has tended perhaps to lessen the attention to handicrafts. Recent enlightened alternatives to the selection examination may bring a further breadth and freedom to the junior school course and allow more emphasis to be given to practical studies.

Secondary School Stage :

While formal technical education was at first confined largely to the junior technical schools, and more recently to the technical high and multi-lateral schools, it now seems that responslbility for this kind of work is obout to be shared widely by modern and grammar schools. In some areas practical work in schools is being described as "handicraft and technical studies." Here and there grammar schools, which have struggled along for years with a solitary wood work master, are finding themselves with a technical wing comprising workshops for wood, metal, and drawing. The modern schools, too, are being equipped with the necessary workshop facilities for these added responsibilities. In the secondary modern schools handicraft is taught to all classes i. e. from 11 to 15 years of age. It is obligatory and is included in the examinations. Two hours or half a day a week are devoted to it. In the secondary grammar schools, handicrafts are obligatory only in the first two or three classes (age 11 to 14) and thereafter becomes an optional subject that may be offered in the school certificate examination taken at about the age of 16. As a compulsory subject in the earlier classes two periods or about 1½ hours per week are devoted to handicrafts. At the higher level, where the subject is optional, three periods combined or two combined periods and one single period (2¼ hours) suffice. Crafts constituted a separate subject in both secondary modern and secondary grammar schools but teachrs are encouraged to integrate the crafts work with other subjects, specially in the case of art and of domestic science for girls, and with the children's general activities and interests.

Aims of Teaching Handicrafts*

The aims of teaching handicrafts in U. K. can be stated as follows :

1. to develop the mind through the use of hands ;
2. to give first-hand acquaintance with traditional crafts and skills ;
3. to provide experience of the discipline imposed by intractable materials and the use of tools ;
4. to provide opportunity for successful achievement ;
5. to develop aesthetic standards ;
6. to stimulate imagination ;
7. To discover interest and vocation.

Syllabii :

There are no official or set handicraft syllabii but the following gives a fair idea of the work done in the various schools :

(a) Woodwork : furniture, toys, things for home and garden model aeroplanes and ships.
(b) Metal work : general bench and forge work, machine work (as for model engineering) and art work in copper.
(c) Needle work : Knowledge of the tools and materials required for making garments and household articles,
(d) Book-binding, making letters for printing, printing on textiles.
(e) Pottery and plastics may also be included in the secondary handicraft programmes.

Boys do wood work and metal work and girls do needle work. Occassionally girls are interested in wood work and metal work but their work in them is in no case limited to making household articles. (Teaching of Handicrafts in Secondary Schools—p. 138).

Method of Teaching

Circular No. 1161 of May 1920 on practical instruction in elementary schools reads as follows :

> "The Board are not disposed to consider as adequate any scheme of practical instruction for older boys unless it includes a training in the skilled use of common tools for the making of common objects serving some useful purpose which the boy can himself

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* *Teaching of Handicrafts in Secondary Schools.* Geneva : International Bureau of Education, 1950, p. 137.

recognise...........The realisation of this aim will entail the ultimate provision for all older boys of at least two years course in handwork, involving the use of a varing extent of both wood and metal and of other materials as circumstances require."

As experience and experiments in teaching handicrafts at different levels accumulated, improvements were gradually introduced. Tradesmen-teachers, for example, made a plea for the isolation of the subject. During the early years of the present century attempts were made to correlate handicraft with other subjects of the curriculum. During the 1920s, self-expression or free activity periods became popular in handicraft teaching. In the name of free expression, tools and equipment were sometimes damaged and material was wasted. The first-aid cabinet played an important role : Formal teaching took a back seat and children were encouraged "to get some wood and make something". A great deal of painting was included in the course and the finished work, though bright in colour, was often slip shod and devoid of the elements of sound construction. Like so many innovations, free handicraft activity achieved real success here and there in the hands of capable teachers. On the whole, however, there seems to have been much waste. The indisciplined freedom became a concern, to the authorities and the reaction against it emphasized the advantages in sound tool training which had been provided under the old more rigid formal teaching method (page 100).

During the 1930's, further steps were taken to improve craft teaching. Process sheets became popular. In addition to these drawings a boy would be given a work sheet on which appeared a full sequence of directions. This to some extent relieved the teacher since once the process sheet had been designed it could be used over and over. Furthermore, during individual work when all boys were making different articles the sheets enabled the boys to work on their own without constant reference to the teacher. More recently the use of process sheets as a teaching device has been criticized for being too rigid and not allowing the boys sufficient scope to discover things for themselves. Seen in this light the use of process sheets and the criticism of such use, constitute one phase in the gradual evolution of better handicraft teaching methods.

It seems now that in U. K. there are no official instructions as regards craft teaching methods. Those in use vary considerably from one teacher to another. Teaching is now more individualized than formerly although there are still occasions when class or group teaching is found useful. The teaching of wood and metal work, especially in the earlier stages, is mainly by demonstration augmented by instruction charts describing and illustrating tool manipulation; the shaping of wood and metal and the construction of joints. The boys are encouraged, however, to think things out for themselves and as the course progresses they are expected more and more to plan their own work, use reference books, and turn to the teacher for advice only when necessary.

Size of the Craft class

According to the 1901 day school court schedule, in the elementary schools the number of children receiving practical instruction from one teacher at any one time should not exceed 24 and after the 31st of March, 1902 this number was to be reduced to 20. For the sake of convenience, double centres were established—workshops for 40 pupils with two teachers.

The building regulations for the years 1904-1907 laid down the following regulation for secondary schools :

> "In every secondary school there should be and in every boardings school there must be a workshop or manual training room which should provide for not less than 15 nor more than 20 scholars under instruction at one time."

Examination

That handicrafts should be included in the examination time-table suggested in the 1911 report of the Consultative Committee on Examinations in the Secondary Schools. From 1954 onwards ordinary level as well as advance level craft work became examination subjects. The general pattern of these examinations today is as follows :

Ordinary Level—Woodwork and Metalwork
One theory paper—from 1¼ to 2½ hours
One drawing paper—from 1¼ to 2½ hours
These are some-times combined in a simple paper.
One practical paper of 3 hours

(In the A.E.B. examinations there are two practicals. one of 2 hours' and the other of 3 honrs' duration).

Under the Welsh regulations there are, in addition to examinations in wood work and metal work, examinations in handicraft (combined) woodwork and metalwork) at both levels.

Ordinary level. Technical Drawing.

Listed under different names. this subject is normally examined by two papers each of 2 to 3 hours.

Advanced level. Woodwork and Metalwork
One theory poper of 2 to 3 hours
One drawing paper of 2½ to 4 hours
One practical paper of 4 hours (or two separate papers of 1½ to 3½ hours).
Advanced level. Technical Drawing.

Listed under different names this subject is normally examined by two papers of 3 to 4 hours each. One of these papers usually has a bias towards engineering though sometimes, as an option, towards building.

The details above give only a general picture. For a more careful analysis the various regulations must be studied closely. In the metal work practical examinations, for example, options are often provided involving machine work and specialised processes. Sometimes a visiting examiner is involved. The differences of approach between the examining bodies is more marked at the Advanced Level than at the Ordinary Level.

The whole question of public examiaations in practical work is an interesting one. It is clear that these subjects were first examined simply because all the other subjects of the grammar school timetable were examined. It is generally held that in grammer schools where children are mainly involved in academic studies, not forgetting a heavy homework programme, practical subjects offer a pleasant opportunity to get away from the desk. In this connection it is easy to see some common aims between handicraft and physical education. Of course when practical subjects are regarded primarily as an opportunity for relaxation and escape from study and without regard to an examination, their status tends to be lowered. Clearly practical subjects like handicrafts have two parts to play in the secondary school program. The general influence of a well-taught craft is of great technical value and a necessary feature of all round educational development. In addition the discipline involved in the preparation for a public examination is of great value. Very often in the grammer school both these objectives have to be gained within the campass of a double period (1¼ hours) a week during the early years and probably no mare than twice this time in the final two years. Because so little time is available in the crowded curriculum some authorities feel that the examination in crafts should consist wholly or very largely of benchwork. There is another contrasting line of thought which advocates the extension of the more academic aspects of handicraft as well as more advanced work in the design and history of craft work.

In the present circumstances in U. K. many of the problems involving practical studies appear to demonstrate the advantage of the comprehensive, bilateral or multilateral school. In some secondary grammar schools the provision of handicraft facilities such as staff and workshops make it impossible for every boy to carry his practical work to G.C.E. level. Even where this is possible, the opportunities in metal work are well behind that the 1959 G.C.E· entries in metalwork are about half of those for woodwork. Owing to the pressure of work and the range of subjects offered in the grammar schools it is likely that in some cases the best practical talent of U. K. remains unidentified in terms of G.C.E. handicraft results. On the whole the boys good at academic work include many who are also good at handicraft. Because practical subjects are attractive to most boys, many of them derive more satisfaction from doing handicraft badly than from doing academic work badly. In schools where the course in handicraft is available only to the less able boys, the G.C.E. will show a large range of ability with ofen a considerable grouping around the border-line mark. On the other hand, the entries from modern schools, fewer in number, tend to show a better average standard. This would seem to be the expected result of a more selected entry working perhaps under more generous conditions of both time and facilities. The comparison is interesting because practical subject form the one aspect of public examinations which bridge across all types of secondary schools. Indeed, many secondary modern schools are better placed in terms of staff and equipment to offer candidates for the examination in handicraft than are many grammer schools, for whom the examination was originally intended. It is well known that practical ability is not inseperably linked with academic ability and since the assessment of handicraft ability is not a pronounced feature of the selection methods at 11, it is only natural to suppose that a considerable amount of practical talent exists in secondary modern schools

Training of Teachers

Handicraft as a subject in the training college programmes admits of two treatments :—

1. There is the important general aspect of handicraft which, like art, forms part of a general course. This, under the name of handwork, has been included in one form or another in training

College curricula from the beginning. The provision of a general course of woodwork and metalwork for non-specialised students has, on the whole, not been very general. It is considered by many that the training college should be the school "writ large" and that establishments for teacher training should offer facilities for the study of every branch of school activity. In the case of handicraft, it is of additional importance that intending teachers should have the technical advantage of a sufficient training in practical work to assist them in the construction of personal teaching apparatus.

2. In the second case there is a particular work of the training of specialised teachers of wood work and metal work. The old position in which some colleges offered handicraft as a three year course while others did not carry beyond a two year period has been resolved now that all training college courses are of three years duration.

As far as the present handicraft training courses are concerned, the students in general spend about a day a week at their main craft and half a day a week at subsidiary crafts. Where canditions lend themselves facilities are often available for extra optional time to be spent in the workshop. Technical drawing and technology lectures are included and much emphasis is directed toward the question of design. The teaching of adults in evening classes has always been one of the special responsibilities of the handicraft teacher. And in this connection the training college has to tackle the dual problem of teaching the student to teach boys handicraft and of extending his experience in craft work as far as possible at adult level. As a rule metal work is the subsidiary subject taken where woodwork is the main craft and vice-versa. Many colleges are also able to include tuition in some of the lighter crafts such as book-binding, pottery, basket making and weaving etc. together with some practice in art.

At the final examination, papers are set in practical work, drawing and design, technology and the study of teaching method applied to the teaching of handicraft. In addition there are the papers in professional and pedagogic studies and thus related to subsidiary academic or other subjects which the student has elected to follow. Much of the examination of the students is based on the personal assessment made by tutors and lecturers and external examiners over the whole period of the course which usually includes periods of teaching practice in local schools.

The training of handicraft teachers is now almost fully in the hands of the training colleges. In most cases this has meant wood work only. Recently, however, (1958-59) many training colleges have added metal work facilities. The training of handicraft in the colleges has thrown an extra responsibility on the grammar schools where during the years 12 to 18 intending handicraft teachers require intensive specialised training. The grammar school, as well as, public school or its equivalent stream in other schools, has the responsibility for the develpment of skill over the 6 formative years corresponding to the traditional period of apprenticeship. Handicrafts in the schools are usually taught by specialised teachers.

Supervision of Craft work

In rural areas handicraft advisers are appointed. In large towns and cities there are local inspectors of handicraft who are responsible for the betterment of handicraft teaching. For house crafts local inspectresses and organisers are provided. The duties of such handicraft advisers or local officers responsible for handicraft include keeping a vigilant eye on workshop conditions, facilities and safety and on the supply of materials; organising local refresher courses and maintaining contacts with teachers, engaged in similar work. Those advisory officers have formed their own association where local experiences can be exchanged and discussed at the national level.

Summary

History

1. The first handicraft, introduced in girls elementary schools in 1840, was needle work.
2. In 1890, hand work was introduced in boys' schools in the form of drawing.
3. After 1890, woodwork was recognised by the Education Department as a school subject in elementary schools.
4. In the beginning of the 20th century the overall hand-work scheme was as follows :

Upto 8 years — Kindergarten work

From 8 to 10 years — Paper cutting and folding, paper and cardboard modelling with clay or plasticine, drawing with pencil and crayon, brush work, introductory needle work.

From 10 to 12 years — As above but developed and applied (also where possible, boys-light woodwork, girls-elementary needlework.)

From 12 to 14 years — Boys—Wood work proper, plasticine, modelling, gardening;
Girls—Needle work, cookery, laundry work, housewifery, gardening.

14 years and above (higher grade and continuation schools) — as above but more advanced; For boys—metal work and science handicraft.

In 1920's the scope of handicraft in elementary schools began to widen. In addition to specific basic course in hand work or domestic science, it was considered worthwhile that boys and girls should be given the opportunity to experience as wide range of other practical activies as the circumstances of the school permitted. Suggested activities included gardening, practical science, book binding, basket making, weaving, knitting, carving and for boys some handiman's courses as prescribed in the books for Boy Scouts.

A great majority of secondary schools had only one craft i. e. woodwork. Metal work could not be introduced in many schools because it necessitated a second workshop.

Present Position

1. Practical work is known as an established principle in infant and junior schools.
2. Handicraft is taught as a subject in grammar and modern schools at the secondary stage. In the secondary modern schools handicraft is given to the children of all classes i.e. from 11 to 15 years of age. It is obligatory and is included in examinations. Two hours or half a day a week are devoted to it. In the secondary grammar schools on the other hand, handicrafts are obligatory only in the first two or three classes, the children there being from 11 to 14 years of age ; and from the 4th class onwards it becomes an optional subject, that may be offered in the school certificate examination taken at about the age of 16. At the lower of these two levels, two periods together making about 1½ hours per week, are usually devoted to the subject and at the higher level three periods together or two periods and one period making in all roughly 2¼ hours. Crafts constitute a separate subject in both secondary modern and secondary grammar schools and are taught by specialised teachers. But teachers are encouraged to integrate the work with that of the other subjects.

In the Junior schools in addition to light woodwork for boys and elementary needlework for girls other practical activities such as book-binding, knitting, basket-making, gardening are introduced. In the secondary schools girls learn domestic science whereas boys are offered courses in woodwork and metal works.

In order to promote good standards of work in handicrafts special advisers and inspectors are appointed to supervise the craft work of schools. They are expected to keep a vigilant eye on workshop conditions, facilities and safety and on the supply of materials ; organise local refresher courses and maintain contacts with teachers engaged in similar work.

II. *U. S. A.**

Introduction

The United States Constitution relegates to the several States almost all decisions and actions relating to education. While each State formulates a curriculum for the guidance of its schools, the schools in each local community enjoy a great degree of autonomy in the organisation of the courses of study as well as in other educational matters. This leads to a great variety of practices which makes it difficult to give a general account of the place of craft work in the elementary and secondary school.

The schools in the U. S. A. do not provide for a separate subject of study under the specific title 'craft work' as is the practice in India. A number of activities, however, which aim at providing work experiences for children are included in the curricula of the various schools under titles such as arts and crafts, practical arts, industrial arts, home economics, agriculture, business, shopwork and others. The great diversity in terminology used in the various States, and the different meanings attached to the various terms, and further to the difficulty of describing the general position of craft work in the United States.

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*Grateful acknowledgement is due to Dr. Willis Ray, Consulant in Industrial Arts. Ohio State University Team, for going through this section and helping us to bring it uptodate.

Craft Work as a Part of Art

To illustrate how craft work forms a part of art work in some places, an extract is given below from the statement of scope and objectives of art education as described in 'Curriculum Development in Elementary Schools (1955)', issued by the Board of Education of the City of New York :

> "Design and construction with various materials. Use of tools, materials and products. Appreciation of the processes of industry."

The curriculum for arts recommended in this publication includes the following activities for children of the various grades :

Kindergarten—Grade 2

Manipulation and experimentation with materials.
Clay modelling
Block building
construction and design with paper
Working with wood
Manipulation of simple puppets

Grades 3—4

Clay modelling : non realistic arrangements, figures, bowls, tiles.
Paper : envelopes, boxes, booklets, toys.
Cloth : animals and dolls using socks, oil cloth, cotton cloth bags, puppets, mats.
Yarn : weaving purses, pocket books, mats.
Wood : using hammer, nails, saw, sand paper.

Grades 5-6

Clay modelling : pottery forms, tiles, slab boxes, figures, non-realistic expression.
Paper : books, boxes, stage properties, costumes, puppets.
Cloth : aprons, costumes, costume accessories.
Weaving : place mats, scarfs, bags.
Wood : original construction using variety of tools.

In 'The Elementary School Curriculum : An overview (1954)', the New York State Education Department suggested that 20% of the time in the primary grades should be allotted for arts and crafts (including music) and 10% in grades 4, 5 and 6 should be devoted to arts and music.

In the publication, 'A Curriculum Guide for the Elementary Schools of Kansas', issued by Superintendent of Public Instruction of that State, the Art Programme recommended that children in grades I-III should learn manipulation and care of more complicated tools and materials. For classes VII and VIII it is stated that art should include practical arts, industrial arts and home-making skills.

Industrial Arts

Of the various activities such as art, practical industrial arts, home economics, etc., mentioned above, industrial arts seems to be the most widely adopted kind of craft work. An attempt will therefore be made here to describe in greater detail the position of industrial arts education in the United States.

According to the "1948-1950" Biennial Survey of Education", "industrial arts was one of two secondary school subjects with the greatest increase in enrolment during the decade and a half from 1934 to 1949. At the end of that period, twenty five percent of all secondary school pupils were enrolled in industrial arts subjects—three-fourths of them in general shop, wood working and mechanical drawing." "In 1949, of the total school population in the junior high schools, 48.2 percent were enrolled in industrial arts. In fact it is found more than twice as often at that level than any other type of school organisation. Variations in percentages of pupils enrolled in industrial arts courses throughout that country ranged from 3.6 percent to 42.1 percent. Eighteen states exceeded the national average."*

It has been estimated that enrollments in industrial arts have increased to 3 1/2 million pupils (35 lakhs) in 1962-63 as compared to 1 3/4 million students (17+lakhs) in 1948-50.* This estimate is based upon the assumption that enrollment in industrial arts bears the same relationship to the estimated school population in 1962-63 as it did to the actual total school population in 1948-50. However due to retrenchments in secondary education in the U.S.A. during past five years in favour of the areas of science, mathematics and foreign languages, growth in enrolments in industrial arts as an elective subject may have been somewhat retarded.

Scope and objectives of Industrial Arts

Although industrial arts has been included in curricula of the schools in a large number of States, there is no unanimity about its scope and purpose. According to the Encyclopaedia of Educational Research[1], "It is hardly surprising, therefore, to find some misunderstanding of the nature and purpose of industrial arts education and to encounter terminology used with widely different meaning."

Gordon O. Wilber, in his book, "Industrial Arts in General Education",+ has defined industrial arts as "those phases of general education which deal with industry—its organisation, materials, occupations, processes and products—and with problems resulting from the industrial and technological nature of society." Wilbur believes that industrial arts should not be a special subject, but an integral part of general education.

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* Marshall L. Schmitt, Trends and Developments in Industrial Arts. *Industrial Arts and Vocational Education*, Vol. 52, No. 1, January 1963, p. 17.

* *Offerings and Enrollments in High school subjects*, Biennial survey of Education in the United States 1948-50. Washington, D.C. : U.S. Government Printing office, 1951.

[1] *Encyclopaedia of Educational Research*, Third Edition, 1960, The Macmillan Co., New York,

+ Gordon O. Wilber. *Industrial Arts in General Education*, 2nd edition, 1954. Scranton, Pennsylvania, International Text Book Company.

According to the Encyclopaedia of Educational Research,[1] "The Industrial Arts Policy and Planning Committee of the American Vocational Association has published a statement presenting the definition of industrial arts education and indicating its place in education. This statement includes such concepts as the following : industrial arts is instruction in shop-work ; it is an integral part of the general education programme of all youth ; it helps provide an understanding of the industrial and technical aspects of life today ; it shares in the responsibility for developing good citizenship ; it concerns itself with significant aspects of production, consumption, and use of industrial products and their effect on daily living ; it involves actual experiences in planning, producing, using and serving various types of consumer goods in common usage ; it develops general skill and resourcefulness in working with things technical and mechanical; it teaches facts, principles, and procedures about schools, materials, processes, mechanics and design; the materials used include woods, metals, plastics, ceramics, textiles, paper and other industrial materials ; though processes and mechanics studied include those related to electricity, motors, engines, structures, and other items of importance to all the people at home, on the farm, at work, and in recreation ; it encourages critical thinking in problem solving related to these matters. The programme embraces experience and study in such areas as wood working, metal working, power mechanics, graphic arts, and crafts with general drawing and planning included in each." It is further stated in the Encyclopaedia that "this description of the scope and nature of industrial arts is widely accepted today, but such scope is not always found in the organisation and extent of actual programmes."

Curriculum in Industrial Arts

There is no uniform practice regarding the content of the courses for the various grades and also the stage at which it is introduced. In some schools industrial arts is offered from the beginning of the elementary grades to post high school classes. In some cases it is offered under some other name or is merged with the other school subjects. For example, in the elementary school programme in the State of Florida. industrial arts is referred to as "related arts" and has been recommended for the lower elementary grades.[2] In Georgia, however, industrial arts is not generally recommended below the seventh grade.[3]

At the secondary stage, almost all the secondary schools seem to include some form of industrial arts, and in many cases it is a required subject at the beginning secondary school levels.[4] According to the Encyclopaedia of Educational Research, "In most schools industrial arts curriculum offerings are organised around some or all of the following areas : (a) drafting ; (b) woodworking ; (f) graphic arts and (g) crafts. From kindergarten through the fourth grade, industrial arts is usually not a separate subject but an enriching activity and a method of learning certain aspects of the regular units of work under the regular grade teacher. Occasionally there is a consultant for industrial arts who assists the regular teacher upon invitation. In grades V and VI industrial arts may be continued in the same manner, although in schools seperate periods are allocated to this work and special laboratories or work rooms are provided. A combination of both these methods is used in some schools. Another variation combines industrial arts with certain other areas such as home making or art, and offers an integrated activity[1]. In grades VII to IX industrial arts is usually offered in an industrial arts laboratory equipped for one or more of the seven areas mentioned above, usually the boys and sometimes both boys and girls are required to take some industrial arts. The trend is toward greater scope in the exploratory opportunities offered to students. In grades X to XII industrial arts may continue in general laboratories with opportunity provided for more advanced work ; or particularly in the larger schools, more specialised laboratories may provide for rather intensive study in selected area."

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[1] *Encyclopaedia of Educational Research*, Third Edition 1960, New York : The MacMillan Co.

[2] *A Guide—Industrial Arts in Florida Schools*, Bulletin 12, 1959. issued by State Department of Education, Tallahassee, Florida.

[3] *Industrial Arts for Georgia Schools*—A hand book for teachers and school administrators issued by the State Department of Education, Atlanta,

[4] *Encyclopaedia of Educational Research*, Third Edition, 1960, The MacMillan Co., New York.

Industrial Arts in the Elementary schools of the State of Florida

Because of the diversity of the programmes actually in practice in the schools in the different States, it is difficult to give a comprehensive summary. As an illustration of what goes on, however, there is given below, in brief, the programme outline recommended by the State Superintendent of Public Instruction for the schools in Florida.

Industrial arts in the elementary grades
(Grades I-VI)

Grade I

Teaching suggestions

Pupils should learn to use the hammer, cross-cut saw, rasp and sand paper early in the year so that their actual use on needed objects may be accomplished with greater ease and safety The teacher should demonstrate the correct and safe way to use tools as the need arises.

Material

Equipment : Work bench or work table with a vise (kindergarten size and perhaps movable) hammers, saw files or rasps, clamps, paint brushes and paints, sand paper, clay, news-paper, cloth.
Supplies : Lumber from boxes, .1/4" ply wood, nails, cartons, scrap materials, strings, wire (stove pipe), books.

Grade II

Teaching Suggestions

Pupils should learn to use five or six tools early in the year so that manipulative work may proceed with greater ease and safety on needed projects.

Material

Equipment : Similar to grade one. May add block plane and brace and bits which can be used with the help of the teacher.
Supplies : Similar to grade one. May add yarn, cane, raffia, inner tubes, etc.

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2 Ibid.

Grade III

Teaching Suggestions

In addition to continued use of hand tools to change materials into a more useful form, children at this age level will enjoy and profit from visits to local industries and from selected films and slides. In the third grade the children may be expected to take more responsibility for planning their activities and following through to achieve disired results.

Equipment, materials and supplies

May be the same as for grades one and two.

Grade IV

Teaching Suggestions

Pupils will show interest in more involved activities and manipulative processes than in the lower grades. The teacher may call on the industrial arts teachers for assistance in new tool processes and materials that may be included in fourth grade activities. Continued use should be made of visual aids, industrial visits, and demonstrations by the teacher, the pupils and other teachers.

Equipment and Materials

At this grade level more space may be necessary to carry on the activities. If a special craft room is not available or if an industrial arts laboratory is not feasible, then additional movable equipment may be necessary. This may include saw horses, additional tools, extra work benches.

Grade V

Teaching Suggestions

Pupils by this time should have acquired the ability to use a few simple tools with a reasonable degree of skill. At this grade level industrial arts should serve the individual interests of pupils by allowing them to plan and make seasonal personal interest and home activity projects. It also serves individuals and group needs of boys and girls in social studies, music, science, arithmetic. Some of these activities will also serve the pupils' leisure time needs.

Equipment

At this grade level pupils will continue to use larger and more hand tools and equipment. The materials will also be more varied and perhaps some of higher quality, especially for gifts and some personal interest projects.

Grade VI

Framework of Content

Maintenance of previously acquired skills. The extended use of more difficult tool techniques, and a more advanced design expressed in :

Drawing : Making drawings or sketches with dimensions of simple projects.

Woodwork : Constructing items used in group activities in other areas, seasonal projects of personal value, gifts. Besides the skills and related learnings, gifts encourage generous and kindly attitudes towards others.

Metal work : Working with aluminium, copper (foil and 24 gauge for tapping) and tin cans give an incentive to read about resources as well as tools and manufacturing processes. Measuring thicknesses of metal, dividing circles with compass, weighing metal, using metal cutting tools and shaping tools as well as finishing metal will give experience in many areas as well as in maintenance of metal articles used in the home.

Ceramics : Making clay bowls. tiles, ornaments, pots, ash trays, etc., by modelling, casting, coils, and slaps, gives an opportunity for expression in design and also in colour. Ceramics is one of the oldest of the crafts and provides an excellent medium through which the life and living of many countries can be studied.

Electricity : Studying the sources of power and the generation of electrical power is directly related to a multitude of things the pupils use every day. Constructing telegraph key sets and using dry cell battery to power the set, a door bell and a bicycle light or horn will be of interest and value to both boys and girls. Even the repair of lamps and extension cords may be undertaken here.

Communications : Besides the electrical powered communication appliances at this grade level, the use of linoleum block cuts and simple silk screen reproductions will lend much to the study of communications in social studies, and language arts as well as their value to the student personally.

Crafts : Leather, plaster of paris, keene cement, plastics, yarn and raffia are other materials that are easy to work with and are usually available to teachers in almost any area. Whether they are of value because they can be integrated with other areas or whether they interest the student for leisure time activities, home maintenance, consumer or production knowledges, they should be utilised.

Equipment and Materials

At the sixth grade level as many tools and materials as is practicable in keeping with the needs and interests of the student and his maturity level should be used. In some instances where the equipment is available and the teacher is competent in its use, a power jig saw, a sander, and perhaps a wood lathe may be introduced. A separate shop or laboratory is ideal for the sixth grade if it is available.

Florida Programme for the Secondary School

As regards the programme for higher grades the following schedule* has been recommended.

**A Guide—Indnstrial Arts in Florida Schools.* Bulletin 12, 1959.

Junior High School
(Grades 7-8-9)

Total School Enrolment	Number and types of shops	Subject Matter Areas
	One shop	Courses
0-399	1—Comprehensive General Shop (Grades 7-8-9)	Planning and drawing, general wood, electricity, mechanics.
	Two shops	Courses
400-699	1—General Crafts (Grade 7)	Crafts—leather, ceramics, art metal, plastics or Native materials.
	1—Comprehensive General Shop (Grades 8-9)	General shop, drawing and planning, wood, metal and mechanics.
	Three Shops	Courses
700-999	General Woodwork (Grade 7)	Craftwork including wood, taught in woodshop area.
	1—Drafting and Graphics (Grade 8)	Graphics Lab.—drawing photography, silk screen, linoleum block, hand press work.
	1—General Metals (Metal, Electricity, Mechanics) (Grade 9)	Electricity and mehanics in metals shops.
	Four Shops	Courses
1000-1299	1—General Woodwork (Grade 7)	General crafts including wood taught in woodshop.
	1—Drafting and Graphics (Grade 8-9)	Drafting including planning and other graphics.
	1—General Metals (Grades 8-9)	General metal shop including electricity and metal.
	1—Home and Power Mechanics (Grades (8-9)	Home and power mechanics including maintenance and operation of home equipment and small 2—and 4—stroke cycle engines.
1300-1599	Five Shops	Courses
	1—Crafts (Grade 7)	Leather, plastics, ceramics, art metal.
	1—Drafting and Graphics (Grades 8-9)	Planning mechanical drawing, elements of home planning; hand press work, silk screen and linoleum block work.
	1—General Wood and Home Machanics (Grades 8-9)	Woodshop to include area for home machanics and maintenance.
	1—General Metals (Grades 8-9)	Metal shop to include introduction to cold metal, sheet metal, and foundry.

Total School Enrolment	Number and Types of Shops	Subject Matter Areas
	1—Power Mechanics and Electricity (Grades 8-9)	Power mechanics and electricity for maintenance and operation of home equipment and small 2—and 4—cycle engines, basic electricity and safety.
	Six Shops	Courses
1600-1900	1—Crafts (Grade 7)	Handicrafts and leather, plastics, ceramics, and art metal.
	1—Drawing, Planning and Graphic Arts (Grade 8-9)	Drawing and planning and graphic arts.
	1—General Wood (Grades 8-9)	Hand and basic machine woodwork.
	1—General Metals (Grades 8-9)	Metal shop to include introduction to cold metal, sheet metal and foundry.
	1—Power Mechanics (Grades 8-9)	Power mechanics for maintenance and operation of home equipment and small 2—and 4—stroke cycle engines.
	1—General Electricity (Grades 8-9)	Basic electricity and electronics.
	Senior High Schools (Grades 10, 11, 12)	
	One Shop	Courses
100-349	1—General Shop (Grade 10)	Wood, metal, drafting and electricity.
	Two Shops	Courses
350-699	1—General Shop (Grade 10)	Wood, metal, mechanics, and electricity.
	1—Drafting and Graphics (Grades 10-11)	Architectural drawing, mechanical drawing, blue-print, and hand and machine press work.
	Three Shops (Grades 10-11-12)	Courses
700-1049	1—Wood and Metals	Hand and machine woodwork and general metal work.
	1—Drafting and Graphics	Mechanical and architectural drawing, blue-printing, silk screen, and hand and machine press work.

Total School Enrolment	Number and Types of Shops	Subject Matter Areas
	1—Electricity and Mechanics	Electricity and electronics, basic auto and 2—and 4—stroke cycle engine mechanics and operation.
	Four Shops	Courses
1050-1399	1—Wood	Hand and machine work.
	1—Drafting and Graphics	Mechanical and architectural drawing; blue-printing, silk screen, and hand and machine press-work.
	1—Electrical	Electricity and basic electronics.
	1—Metals and Mechanics	General metal work to include sheet metal, welding, forging. metal-forming machine.
	Five Shops	Courses
1400-1749	1—Wood	Hand and machine woodwook.
	1—Drafting and Graphics	Mechanical and architectural drawing; blue-printing, silk screen, and hand and machine press-work.
	1—Metal	Sheet metal, welding forging, metal-forming machines.
	1—Electricity	Electricity and basic electronics
	1—Power Mechanics	Auto and 2—and 4—stroke cycle mechanics, maintenance and repair.
	Six Shops	Courses
1750-2099	1—Wood	Hand and machine woodwork.
	1—Drafting and Graphics	Mechanical and architectural drawing; blue-printing, silk screen, and hand and machine press work.
	1—Metal	General metal work to include sheet metal, welding forging, metal-forming machines.
	1—Electricity	Electricity and basic electronics.
	1—Power Mechanics	Auto and 2—and 4—stroke cycle mechanics, maintenance and repair.
	1—Crafts	Handcrafts in wide variety of materials—leather, textiles, ceramics, jewellery, native materials, plastics, art metal.*

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* *A Guide, Industrial Arts in Florida Schools, Bulletin 12, 1959, State Department of Education, Florida.*

New Curricuinm Trends—Reflecting the Technology

The extensive quotations from material prepared by the State of Florida are completely justified since they represent the vast majority of the programmes of industrial arts in the U.S.A. today. In the past industrial arts practical work and theory were drawn from cottage industries and the handicrafts of America. Due to rapid industrialization during the past several decades more of an emphasis has been placed on modern industry as the source of shop experiences and technical information.

In a constant attempt to improve school programmes, leaders in the field of industrial arts education have suggested new curriculum patterns. A group of teacher educators and graduate students at The Ohio State University have experimented with pilot programmes and teaching materials that reflect the technology of the American culture. According to a scheme presented in 1947,[1] the curriculum of industrial arts would be organized around the areas of construction, communication, manufacturing, power, transportation and management. This programme has been further developed in *Technology and Industrial Arts*[2] by Delmar W. Olson.

According to Olson:

> "Industrial arts is a study of the technology, its origins and development; its technical, consumer, occupational, recreational, social, and cultural nature; and its influences through experimenting, creating, designing, constructing, and operating with industrial materials, processes, and products. Its purposes are to acquaint the student with his technological environment and to aid him in the discovery and development of his own human potential."[3]

In the next few years the secondary school programme of industrial arts will be influenced significantly by such new curriculum proposals. However, the elementary school programme may be less influenced and therefore remain basically arts and crafts in character.

Training of Teachers for Industrial Arts

As in the case of curriculum there is no uniform practice followed in the training of teachers for industrial arts. Approximately 210 colleges and universities offer a B.Sc. degree in industrial arts education in the U.S.A. However, an example is given below of qualifications prescribed in the State of Florida. The minimum requirements by this State for certification for teaching industrial arts may be on either of the following two plans :[4]

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[1] William E. Warner, et. al., *A Curriculum to Reflect the Technology*. Area of Industrial Arts Education, The Ohio State University, Columbus 10, Ohio, 1947, 60 pp.

[2] Delmer W. Olson, *Technology and Industrial Arts*. Epsilon Pi Tau, Inc., University Station, Box 3111, Columbus 10, Ohio, 1957, 256 pp.

[3] Delmar W. Olson, What Guidelines should be Followed in Determining Curriculum Content for Industrial Arts? *Improving Industrial Arts Teaching*. U. S. Department of Health, Education and Welfare, Washington, D.C., 1960, p. 23.

[4] *A Guide, Industrial Arts in Florida Schools, Bulletin* 12, 1959. State Department of Education, Florida.

Plan One—Thirty (30) semester hours are required in industrial arts which must include not less than 6 semester hours in each of four of the following sub-fields: (a) metals and allied industries, (b) wood and allied industries, (c) transportation industries, (d) graphic arts and allied industries, (e) electrical and allied industries, (f) handicrafts.

Plan Two—Regular certification in "Industrial Arts", followed by a parenthetical statement indicating by sub-fields will also be given in one or more of the sub-fields where the transcript shows not less than 12 semester hours in the first sub-field, not less than 9 semester hours in the second, and not less than 6 semester hours in each succeeding sub-fields,

According to the Eneyclopaedia of Educational Research, "Perhaps the most important problem of instruction in industrial arts is that of securing an adequate supply of professionally qualified teachers for the field......Although certification standards vary considerably throughout the country, it is becoming rather common place to expect the beginning industrial arts teacher to have a four-year college degree which covers (a) liberal cultural subjects: (b) professional subjects in education, including special methods and student teaching; and (c) industrial arts courses that include basic training in a wide variety of shop areas and specialisation in at least one. A number of States require the beginning teacher to secure from 10 to 30 semester hours of additional credit plus satisfactory teaching experience to qualify for continued service."

Evaluation in Industrial Arts

As regards the practices adopted to evaluate results in industrial arts, Gordon O. Wilber writes,[1] "There has been little by way of a standards practice in arriving at grades (marks) for industrial arts students. In general, grades (marks) have been determined either by an estimate by the teacher or by grades assigned to finished projects or to tests on information. Sometimes a combination of two or more of these bases is used. It is evident, however, that grades (marks) have been determined largely on two types of evidence: (1) development of skills as indicated by the finished project, and (2) acquisition of information as shown in ability to pass a test.....There are several 'blind' spots representing practices in measurement that have been entirely ignored. For example, almost no attempt is made to measure the growth of students in their ability to think and solve problems. Other features that are disregarded are the extent to which a student develops consumer knowledge, his ability to judge and appreciate design, and his growth toward the development of a hobby or a recreational interest."

U.S.S.R.

Introduction

The foundation of the present system of Soviet education were laid in March, 1919 at the eighth congress of the Socialist Party of the U.S.S.R., where-by "free, compulsory, general and polytechnical education" was recommended for all the children upto the age of seventeen. In the Soviet Union, the term "Polytechnical education" is used for manual training. Polytechnisation does not mean the technical training in any particular trade or profession, which is imparted through special institutions known as technicums or trade schools. There, polytechnisation stands for preparing children for doing skilful and intelligent work. It is taken both as a system as well as a method of education.* The emphasis is laid, not only on imparting knowledge of skill in a particular craft, but also on cultivating a scientific understanding of the material used in the craft-work as well as the realization of its importance in the economic scheme of the country. It aims at creating a polytechnical outlook in child's mind and increasing his ability to apply that knowledge and skill in practical fields.

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[1] Gordon O. Wilber—*Industrial Arts in Genera Education*, Second Edition, 1954, International Textbook Company, Scranton, Pennsylvania.

Professor Kairov of the Academy of pedagogical Science, defined polytechnical education as "a broad social movement for a new conception of work................., which makes it possible through the union of the knowledge of fundamentals of sciences with labour, to advance towards the abolition of the contradiction between intellectual and manual work".

According to Krupsakya (Lenin's wife), the aim of polytechnisation is "alround education of an individual, who could be the worker and the master at the same time."

Historical Perspective

The idea of polytechnical education emerged out of the Marx's recommendations that the child's edcuational programme should include intellectual education, physical education and technical education, which should "acquaint the child with the basic principles of all processes of production, and also give him the habit of dealing with the most simple instruments of all production."

Russian education system has a long tradition of scholarship in science, technology and arts. As early as 1862 and 1867, the engineering school of Moscow demonstrated in exhibitions, held at London and Paris, a system of handicraft— education along with novel samples of metal and wood products, made by students. These were hailed throughout the world and the majority of European and American countries got the incentive to adopt this system in actual practice, from those exhibitions. So it was from this time, when an era of handicrafts, started and all the instructions were made to converge to and diverge from the production of goods.

During the early nineties, the industrial developments in various countries created favourable conditions for the workers' movement. In Russia, before the revolution of 1917, there were separate educational systems for the masses and the intelligentsia. The revolutionaries opposed the division of society into brain-workers and manual workers. And, after the revolution of 1917, some of the socialist revolutionaries regarded polytechnisation as the only method of social education.

Till about 1926-27 there was much talk about polytechnical instructions. But since there were no adequate arrangements for the training of staff or setting up of large scale workshops, the introduction of polytechnical education could not be introduced till 1928. Also there was no research work, available on the theoretical and the practical aspects of the teaching techniques in this particular field. Thus no comprehensive instruction program could be chalked out for the desired education system.

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*"Soviet Russia Goes to school", by Beatrice King.

It was believed that if the bare minimum of learning was given to the persons who had already been working in the field, the problem of securing trained personnel could be solved. Actually there were hardly any teachers or educationists who could advise authoritatively on the subject. There was much confusion, on what polytechnisation actually meant. Thus those early protagonists of polytechnisation had to face enormous difficulties.

In 1931, the first institute to provide facilities for doing research work in problems like the classification of tools, equipment and other material according to various purposes and age groups, was set up in Moscow. By 1936, the school workshops were fully equipped with tools, instruments, benches, lathes etc.

In 1937, the wave of polytechnisation got a set-back. The educators were of the opinion that it had ceased to be the study of scientific principles of production and instead, had become only the imparting of instruction in hand work. They suggested that since handwork could be taken up even in clubs, the time in schools should be utilized for scientific studies. Thus polytechnical instruction was abandoned in most of the schools excepting a few which continued to encourage the children to receive training in hand work. During the war-period, the school workshops were again revived and when the war ended, the question of polytechnization came up again.

In 1953, the Ministry of Education of R.S.F.S.R. issued a methodological directive according to which, it was envisaged that in classes I to *IV* the children should have hand work as a subject. Some of the crafts, recommended for them were paper and card-board work, clay-modelling, plasticine modelling, sewing, embroidery, book-binding and making of ornaments etc. Sometime the student of class *IV* could receive elementary instructions in carpentry and learn to use tools. The children of classes *V* to *VII* were required to work in workshops and school plots. They were to be given demonstrations in the actual working with wood and metal. They were expected to learn how to handle tools like hammers, saws and screw-drivers and eventually to work on machines. The children of late primary and early secondary grades were required to have a practical work period so that they could acquire an understanding of the principles of production. They were required to do practical work in workshops, school plots, local factories, tractor station collective farms or state farms etc. according to their availability. Polytechnical education at this stage became a tool for learning other subjects and thus it served as an arena for their application.

As adequate facilities of laboratories, and workshops, required for the practical work, were not available in most of the schools, the students frequently paid visits to factories, power stations, fields and forests for getting practical training. The actual operation of mechanical equipment was shown and the various technological processes were thus explained. In the rural areas they visited agricultural lands and learnt plant-growing, and methods of animal breeding etc.

Some sort of craft education was also given in clubs. Here the children could learn amateur radio engineering, elementary electrical-

[illegible] time.

Present System of Polytechnical Education

Recently, the Ministry of Education of Russian Federation has approved a new curriculum in which an attempt has been made to bring education closer to the life of the pupils. According to this, the broad aim of imparting polytechnical instruction has been agreed upon to be—to help in the moral, physical and aesthetic development of a child and to increase his readiness and love for work.

Aims of Polytechnical Education*

The aims of the Polytechnical education in Russia are as follows :—

(a) To make the pupils familiar with the properties of the material, processed by them.
(b) To acquaint them with the mechanisation of labour.
(c) To cultivate in them an understanding of the modern methods of production.
(d) To develop in them an ability to organise a job efficiently and gain technical proficiency in labour.
(e) To train their mind in technical thinking.
(f) To promote in them a desire for active participation in socially useful work.

Polytechnical Education in Elementary Schools of Eight years' duration

In the reorganization of the elementary school system great importance has been attached to the programme of work training, which has been divided as follows :—

(1) Self service and household work.
(2) Agriculture work (growing plants).
(3) Paper and card-board work.
(4) Clay modelling.
(5) Technical modelling.
(6) Socially useful work.

Syllabus for gardes I to IV

Aim The chief aim of mannual work at this stage is to prepare pupils psychologically for participation in socially useful labour.

Crafts taught : Instructions are imparted in simple crafts like paper and card board work, clay and plasticine-modelling, and spinning. Children are trained to make toys, models and poltery articles. The school generally has a small garden or plot, where the pupils grow flowers and vegetables. The idea of the labour at work is given through field trips and excursions to farms and factories.

In the school premises the social work is done through the cleanliness programmes and working in the school cafeteria's. At home the children are required to do domestic work like sweeping, sewing, washing dishes etc. For giving technical education, which takes ,about 12% of the school time, erector sets and other standard assembly sets are used to prepare various models, tools and machines.

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*"Polytechnical Education and the Soviet School reform," by Nicholas Dewitt—Russian Research Centre, Harward University.

Syllabus for grades V to VIII

Polytechnical education at this stage is quite broad based. In these grades about 15% of the school time is devoted to it. The purpose of the programme is not so much to teach handicraft as to cultivate an understanding of the scientific principles of modern production.

Crafts taught

The crafts taught in these grades are : wood work, metal work, electrical work, agricultural operations etc; and domestic crafts for girls. Practical training in these grades is given in school workshops, and experimental plots, where agricultural experiments and practical work are conducted. The school workshops receive production orders from the neighbouring industrial plants and co-operation farms and the students work there and are paid for their labour. The income is usually used for organising trips or for buying sports or musical equipment. Special attention is paid to keep up the quality of the goods produced.

In the beginning the pupils usually deal with the simple tools, but gradually they are introduced to the complicated ones. The workshops are equipped, in addition to tools etc., with about 15—20 work—benches, charts etc. In the case of wood craft there are different samples of wood. The training in wood work covers instruction about the characteristics of different woods and their uses, seasoning of wood etc. By the time the pupils reach grade V they are supposed to prepare boxes, handles for tools, shelves, dust pans, window corners etc. The items like feeding racks and bird houses also are prepared in collaboration with metal workshop. In metal craft they are taught about ferrous and non-ferrous metals, their alloys and the techonology of metals. The articles like metal dustpans, shovels, buckets trowels, hangers, bolts, nuts etc. are prepared by the pupils of grade-V. Labour training is also imparted through activities like sweeping of the yard, collection of scrap metal, paper and rags as well as other cleanliness programs in and around the schools. For girls, home science is a special option of great importance, whereby girls are trained not only in sewing and cooking but also in home hygiene and family recreational activities.

Time devoted to Mannual work.

Two lessons a week are alloted to craft-work in grades I to IV, and three lessons per week to grades V to VIII. From grade III onwards, children are also required to devote additional 2 hours a week (after the school time) for socially useful work.

Polytechnical Education in General Secondary Schools

The statute of the Council of Ministers of R.S.F.S.R. on secondary and general education, labour polytechnical schools with Vocational Training, defined the following aims of Polytechnical education in General Secondary schools. "The secondary general education, labour polytechnical school with Vocational training, provides, on the basis of combining studies and the pupils' socially useful productive labour, complete secondary general and polytechnical education as well as vocational training for work in a branch of the national economy or culture."

Polytechnical Education has a very important place in the secondary school curriculum. After completing the secondary education a stndent is supposed to be well equipped for some vocation as well as for pursuing higher studies. Thus, it is useful for all types of pupils. One third of the total time is devoted to it. The secondary schools are either attached to some industry or some co-operative farm in their neighbourhood. These have a responsibility to set up the school workshop and to provide staff and other facilities. Thus only those subjects, which can be attached to some neighbouring factory or farm, can be offered by schools. This however, make the choice of vocations very limited.

In grades IX to XI the study includes theory as well as practicals. Even the practice in actual production is also given before the final tests. Out of the total time of 12 hours a week provided for polytechnical instruction, one third is devoted to the theory and two thirds to practical training and practical production work. After imparting the theoretical knowledge, practical training is given. In rural areas training is usually related to agricultural requirements.

Theoretical information includes the information about machines, their working designs, their operation, electrical engineering, automatic devices, planning and organisation of labour, fixing of work quotas, production cost and prices.

In the practical training, due attention is paid to proper gradations. In the beginning, the students receive practical training in very simple operations, and slowly and gradually, more complicated operations are introduced to them.

Some of the trades which the children select, are given below :—

1. Machanics:—Fitters, foundrymen, machine tool operators, turners and fitters.
2. Wood work:—Joiners, cabinet makers.
3. Electrical and Radio engineering.
4. Building and Construction.
5. Chemical Industry.
6. Light Industry:—Textiles, hosiery, leather goods, food processing.
7. Transport and Communication.

While giving education in agriculture, they are also given mechanical training about the farm machinery, automobile and tractor machanics, along with the techniques of growing. Polytechnical education also include subjects like salesmanship, book-keeping, typing, printing and drafting according to the country's needs.

Training of Teachers:—

Polytechnical expression and practical experiences are emphasised through out the period of training of the teachers. This period is for 4 years for the teachers for elementary classes and 5 years for the teachers for secondary classes. Even at the higher level more emphasis is laid on these two factors. Teachers in colleges and Universities also give a polytechnical colour to their teaching.

The pupil teachers have to devote time for the industrial training and field work. Every teacher is supposed to be proficient in a number of trades. Along with the basic knowledge of the various operations, the teacher is also supposed to know the method of teaching them. Most of the training institutes have industrial pedagogical departments to impart practical training to the teachers. Some times they are also required to work in the factories and practise under the guidance of skilled workers. During the last two terms of their course, that is during the last year of their training, the pupil teachers have pedagogical practice in schools, pioneer camps and in teaching industrial practice.

CHAPTER IX

CONCLUSIONS AND RECOMMENDATIONS

The present study is based on the analysis of syllabii prescribed for the elementary and secondary schools in the different States ; the study of the reports and other literature relating to craft education in India and other countries, and the analysis of 730 responses received from secondary schools all over the country in reply to a comprehensive questionnaire on the organisation of various aspects of craft education in the schools. The conclusions derived in this chapter, therefore, are based on the different aspects of study in this report. These have been grouped according to different aspects of craft education in India. The recommendations are also based on the various problems emerging from the study. It is, however, felt that some working committees should go deeper into the various problems through observational studies and interviews with significant persons in order to prepare a set of recommendations. However, the study of the material made available has resulted in certain recommendations which are put in this chapter for consideration at different levels.

A. CONCLUSIONS

I. General

1. Craft has been accepted as an integral part of general education in the schools in almost all parts of the world. Craft activities in various parts of the world include a variety of programmes such as manual or productive work, industrial and vocational arts, handicrafts and vocational programmes.
2. Increasing attention seems to be devoted to defining the objectives of craft teaching in schools. The generally accepted objectives in different countries seem to be (i) development of physical capacities ; (ii) development of aesthetic taste and appreciation (iii) serving as suitable media for developing self-expression, discipline as well as familiarity with raw materials, tools and social realities ; (iv) providing training of senses ; (v) formation of character and will ; (vi) developing wholeness of personality, team spirit, respect for manual work, awareness of duty and satisfaction of creative urge ; (vii) serving as a means of presenting the content of other subjects in a concrete form.
3. The generally accepted objectives of the teaching of crafts in the elementary schools of India seem to be : (i) developing manipulative skills ; (ii) providing creative experience ; (iii) developing character traits ; (iv) providing experience of productive work.
4. In the secondary schools of India, the main objectives of the teaching of crafts seems to be (i) development of positive attitude towards work ; (ii) development of technical skills ; (iii) providing vocational experiences and opportunities.
5. Although there has been an obvious growth of opinion among the educationists and official circles in favour of the

utility of craft work in schools yet there is no evidence of public opinion in support of this subject. On the contrary there is some evidence to show that various attempts for introduction of manual work in schools could not succeed on account of the want of the supporting public opinion. It seems that an attitude of apathy, if not antagonism, prevails in the public, towards the introduction of manual work or crafts in the schools.

II. The Present Status of Crafts in the Indian School System

6. Craft forms a compulsory subject of central importance in all the elementary schools run on Basic education lines.
7. Craft is taught as a compulsory subject even in the non-Basic elementary schools in many States.
8. There is a definite trend in the country in accepting craft as an integral part of secondary education. In most of the higher secondary and multi-purpose schools in the different States, craft has been accepted and recognised as a compulsory core subject.

III. Organisation of Craft Work in Schools

(a) *Choice of Crafts by Pupils*

9. There seems to be a trend in the direction of providing a variety of crafts in the elementary and secondary schools.
10. In the Basic schools the general pattern is to make provision for each child to learn one main and one subsidiary craft.
11. In other elementary schools of the non-Basic type, a child is generally required to take up either one or at the most two crafts.
12. Most of the secondary schools provide only one craft for a student at one time. More than half of the schools—responding to our questionnaire—in any State, do not have any provision for the change of crafts during the secondary school course.
13. The elementary as well as secondary schools of the country do not seem to be using any scientific procedures for determining the aptitudes of pupils for the various crafts offered in the schools. The most important basis for the selection of a craft by a pupil, as revealed by the present study, seems to be provision of a craft in the school.

(b) *The Basis for the Provision of Crafts in the Schools*

14. Several reasons have been given for adopting a particular craft in the schools. The schools are generally at liberty to choose from among the crafts prescribed in the syllabii. A large majority of the secondary schools however have reported that the crafts taught in them are linked with those practised in the surrounding areas.

(c) *Time Devoted to Craft Work*

15. At the elementary stage there seems to be a large variation in the time devoted to craft work in different classes of the same school, in different schools of the same State and also in the schools of the different States. The time ranges from 2 to 12 hours in primary classes and from 2 to 15 hours in the middle classes.

16. The secondary school syllabii generally do not mention the exact time to be devoted to craft work.

(d) *targets of Achievement in Craft Work*

17. No systematic attempt seems to have been made in evolving workable targets of achievement in different crafts both in terms of time and products for the various grades in the elementary and secondary schools. For Basic schools usually targets are laid down in relation to time, quantity and quality of work. These targets are proposed at three levels—State, region and school. In some cases targets are also proposed in terms of money value.

(e) *Evaluation of Craft Work*

18. In the elementary schools run on Basic education lines craft forms an examination subject and the general practice is to hold an internal examination which involves examination in the theory of craft work, examination in the craft practicals and consideration of the regular records of craft work maintained throughout the year.

19. Most of the syllabuses for elementary as well secondary schools do not give any suggestions for systematic evaluation or assessment of craft work in schools.

20. The practice in the secondary schools regarding the assessment and evaluation of craft work seems to be varying but maintenance of some type of records of craft work have becomes an accepted practice in the majority of the schools. Passing in craft work is, however, compulsory in the higher secondary school examination in some of the States where craft has been accepted as a core subject.

(f) *Duration of Craft Teaching in the Schools*

21. In the elementary schools run on Basic education lines craft is taught in all grades from I—VIII or upto VII in some States depending on the duration of the elementary school.

22. In the non-Basic elementary schools the duration of craft teaching varies in States. In some States craft is taught in all the classes of the elementary school whereas in others craft is taught only in some of the classes.

23. In most of the secondary schools where crafts are taught, they are introduced in the 6th standard and continue upto 10th or 11th standard. In some schools craft is introduced earlier and does not go beyond the 8th standard. In some other schools craft is introduced much earlier and continues through out the secondary stage.

IV. Crafts Prescribed for or Taught in Schools At Different Levels

24. The common crafts suggested in the various elementary school syllabii are: Agriculture, gardening, spinning, clay modelling, toy making, pottery, paper and card board work, book craft, home craft including sewing, tailoring, embroidery and wood work. There are a few crafts peculiar to some of the States. For example, bamboo work in M.P., coir work, basketry and Rattan work in Kerala, lacque industry in Assam and chalk making and Abri maki in Himachal Pradesh.

25. The integrated syllabii for elementary schools recently adopted in some of the States, recommend in the name of hand work, other activities [such as, art, drawing, music, needle work and

simple craft work for non-Basic schools.

26. In all, 47 different crafts have been prescribed in the different syllabii for secondary schools. But the most popular common craft prescribed in many of the syllabii are hand spinning and weaving, wood work, tailoring, metal work, needle craft and embroidery, leather work, gardening, clay modelling and paper mache.

27. The crafts reported to be actually practised in the secondary schools of the different States are as many as 47 in all. Spinning seems to be the most popular craft in a majority of the States. Agriculture is popular in Mysore and Andhra, wood work is practised in a majority of the schools in West Bengal, Orissa, Maharashtra and M.P. Among crafts for girls embroidery seems to be popular in most of the States.

V. The Qualification of Craft Teachers in Schools

28. In a large majority of junior and senior Basic schools craft is usually taught by teachers who have had regular training in methods of teaching in the Basic teachers training institutions where craft forms one of the aspects of training. In some of the secondary schools also Basic trained teachers are employed for the teaching of crafts, but Basic teacher training institutions do not seem to be the main source from which the secondary schools draw their craft teachers. These secondary schools draw their teachers from a large variety of institutions including technical schools, art institutions, polytechnic departments, specialised craft institutes, industries' departments, home science colleges, Basic training colleges, private centres such as Sarvodya Training Centres, Khadi and Gramodyog institutes, occupational or vocational institutions, technological institutes, agricultural colleges, departments of industries and commerce, department of horticulture, schools of engineering and institutions of social welfare departments.

VI. Facilities for the Training of Craft Teachers

29. The existing facilities for training in craft are mainly of the following three types : (i) technical craft training institutions run by the Industries Department or vocational training institutions ; (ii) teacher training institutions under the control of the Education Departments of the States ; (iii) special craft training institutions or wings attached to the teacher training institutions for training of teachers in crafts under the control of the Education Departments.

30. On the whole the existing training facilities seem to be quite inadequate and limited. Due to the lack of coordination between Education Departments and the Departments organising technical craft training institutions, the existing resources are not being properly utilised. Moreover, the general experience is that for craft teachers in schools as well as the training institutions, mere technical training in crafts is not enough.

VII. Administrative Practices Related to Craft Education in Schools

(a) *Physical facilities for craft teaching in schools*

31. Building accommodation for Craft Work in Schools :

(i) Some States provide a separate room for craft work but the position on the whole seems to be quite unsatisfactory.

(ii) The specifications laid down by the various Departments for providing accommodation for craft work per school are different. Some States have laid down standard size of craft classes and craft sheds. In some cases the accommodation is calculated according to number of children in the class. The rate for such calculation is 15 sq. ft. per child for Basic schools in West Bengal and Madras. The study indicates the need for evolving systematic formulae or specifications for the provision of accommodation for different crafts and for schools at different levels.

32. Supply of equipment for Craft Work :

(i) The general practice seems to be that the equipment is supplied by the State Education Departments. Only a few States have given some formula for the supply of equipment. For example, Madras provides equipment for cloth craft for a junior Basic school @ Rs. 300 per teacher. In some of the secondary schools a few students have been reported to be possessing their own set of tools. But this does not seem to be a common practice in any of the States.

(ii) Some of the State Departments of Education have worked out lists of equipment for different crafts. But on the whole there seems to be a great need for working out systematic formulae or specifications for providing a set of minimum craft equipment to the schools.

(iii) From the responses of the secondary schools it appears that the secondary schools seem to be generally quite satisfied with the supply of craft equipment.

(iv) Adequate arrangements for the timely repair of craft equipment do not seem to exist in most of the schools.

33. Supply of Raw-Materials :

(i) Some States adopt systematic criteria for the supply of raw material. But on the whole the procedures are not systematic.

(ii) In most cases raw-materials are supplied by the Education Departments. Only in a few cases the schools are authorised to purchase raw materials in an emergency.

(b) Disposal of Craft Products prepared by the Students

34. The policy regarding the uses to which the income from the sale proceeds of the craft products should be put, seems to be varying in different States. In Andhra Pradesh, for example, the Department expects the income from the disposal of craft products in junior Basic schools to be utilised for children's welfare, in senior Basic schools for supplying fodder for cattle, in high schools for the purchase of craft equipment and improvement of the craft department and in multi-purpose schools for the improvement of craft department. In Assam and Madhya Pradesh the finished products are sold according to the Market Value and profits are deposited in the Govt. Treasury. In Madras the net income from craft work is given to the management of the schools for providing cloth and food to the school children ; for providing equipment. In Maharashtra, Bihar and Himachaf Paadesh, the Department expects to

recover through the sale of craft products the expenditure on raw-materials as well as labour and depreciation charges. In Uttar Pradesh it is mentioned that while crafts are taught as a subject and not with any profit motive some profit is expected from agriculture farms and from spinning and weaving. In middle and secondary schools the income from crafts is deposited in their accounts and purchases and other necessary expenditure are made out of it. In Government schools the income from craft materials is deposited in Government account. The income from the sale of agricultural farm produce of senior Basic schools is deposited in the school account and is utilised for the betterment of the school farm. In Rajasthan the finished craft produce is sold. The sale price is fixed 25% above the cost of raw material. In West Bengal in the case of junior and senior Basic schools the Department expects some economic return from craft work and income from the disposal of craft products is deposited in the treasury. Recently the schools have been directed to use money from the sale of craft products for school meals and uniforms.

35. The procedures adopted to dispose of craft products prepared by students vary considerably among the States. The most prevalent method of disposal seems to be that of sale in public either through auction or in the market. In many cases the products are sold to the pupils and the teachers in the schools. In some cases they are returned to pupils. Some schools, however, retain them either for their use or for exhibition purposes.

36. The different States adopt different units for calculating the economic returns from the disposal of craft products. Maharashtra, for example, calculates return in terms of percentage of the expenditure on raw-materials as well as labuor and depreciation charges recovered, Some States have reported the economic returns in terms of hanks of yards of cloth. It is. therefore, difficult to form any comparable idea about the economic returns from the disposal of craft products in different States.

37. From the analysis of the responses of the secondary schools it appears that the problem of the disposal of craft products is not being dealt with as carefully as it should be.

(c) *Budget for craft education in the States,*

38. The State Departments of Education do not generally make any separate provision for craft education in their educational budget. Only Gujarat State has reported that it sets apart 1.3% of the total educational budget for craft work in schools.

(d) *Provision of craft teachers*

39. In the junior classes of the Basic schools generally the class teachers teaching other subjects are expected to teach crafts also. For the senior classes sometimes in some schools separate craft teachers are provided.

40. In the non-Basic elementary schools also the practice of providing a separate craft teacher does not seem to be followed.

41. A large number of secondary schools have at least one teacher per craft. The situation in Rajasthan and Maharashtra, however, is rather unsatisfactory in this respect, as only 32% of the schools ln Rajasthan and 38% of the schools in Maharashtra

have reported that they have got one teacher per craft. In Gujarat 46% of the schools report that they have more than one teacher per craft.

42. The position regarding the adequacy of staff for craft work in secondary schools varies from State to State. The range of percentage answering in affirmative is from 31 to 92. Schools in Gujarat, Maharashtra and Uttar Pradesh seems to be very much satisfied about the adequacy of the staff. In West Bengal, Rajasthan, Orissa, Mysore, Bihar and Andhra at least half of the schools feel that they have adequate staff for craft work. Fewer schools in Madhya Pradesh and Kerala report that they have adequate staff.

43. Generally it appears that secondary schools employ teachers who are Matric-pass and who have had some training in crafts. It is reported by a large namber of schools that they have difficulty in securing good trained teachers for the teaching of crafts.

(c) *Supervision of craft work*

34. Supervision of the day-to-day craft work is generally done by the craft teachers and the school headmasters.

45. At the level of the Education Department generally there is no provision for separate personnel to supervise and inspect craft work of schools. In this respect the example of the United Kingdom might well be followed. There, craft supervisors in different regions see to it that the schools have the facilities necessary for the organisation of craft work and that the day-to-day craft practices are organised systematically and scientifically. In addition these supervisors give guidance to the craft teachers, make their experience of different schools available to all the schools in their regions and organise seminars, refresher-courses and in-service training courses. Occasionally national seminars are also organised wherein the experiences of the different regions are exchanged.

(f) *Craft Syllabii*

46. A perusal of the various syllabii for different levels of the schools of the various States leaves much to be desired. Some of the striking limitations of our existing syllabii are :

- (i) The absence of a very clear statement of the objectives of craft education in functional terms.
- (ii) Absence of well worked out functional targets of achievement for the different grades.
- (iii) Lack of clear instructions about the number of crafts to to be taken up by a school and about the practice of craft work in the schools.
- (iv) Inadequate instructions about the mode of conducting examinations in craft work, the different aspects to be taken into consideration while assessing the craft work and the weightage to be given to each of these aspects.

(g) *Literature on crafts*

47. There seems to be a dearth of suitable literature on various crafts for the use of craft teachers in schools.

48. There is need for producing suitable literature on various crafts for the children of different levels.

B. RECOMMENDATIONS

These recommendations are meant for consideration of agencies at different levels. They are being given here in the hope that when implemented they will help to improve craft education and the utilisation of craft in educatien in the country.

1. For the Central Government

1. The place of craft has already been recognised and accepted in all stages of Indian school system but it should be categorically stated. This will make it possible to have some crafts in education upto the highest stage. The main aims of craft education will be to develop favourable attitudes towards work and technical skill and to provide work experience to the students. It is also necessary that the students should share in the experience of contributing to the productive work of the country. From this point of view craft may be interpreted in abroad sense as meaning experience of productive work involving some technical skill. Such work should form a compulsory part of schooling at the elementary and secondary education levels.
2. An enquiry should be initiated into the problems of adoption of craft at the various stages of education. Such an enquiry would help to locate the main obstacles and the steps that should be taken in order to smoothen the introduction of craft or work experience in education at different stages.
3. The various objectives to be fulfilled by craft education should be clearly worked out for the diflerent stages. This can be achieved if a central agency undertakes this task with the help of people from the different States.
4. Some criteria should be worked out for selection of crafts both for the elementary and secondary schools. These criteria may develop from the immediate national needs. Some criteria are suggested below :—

(*a*) *Significance for the national development*

The country is entering into an age of rapid industrialisation and technological progress. Crafts providing experiences which contribute to the achievement of such an objective, may be given preference. This would mean introduction of technical crafts in the secondary schools. These crafts would help students to develop technical skills needed for all kinds of technical jobs in the country. This would be a kind of polytechnisation of secondary education.

(*b*) *Importance of craft or work experience for education.*

Basic education envisages the use of work experience for the education of the child. As far as possible work experience should be utilised in the elementary schools for teaching different subjects. Correlation should come in a natural way and should not be forced. The spirit of correlation should be accepted by teachers. This would help in avoiding correlation degenerating into a rigid, closed-in methodology.

(*c*) *Crafts of local economic significance*

India abounds in various kinds of raw material which should be properly utilised in schools for providing craft or work experience to students. Local conditions should be taken into consideration while selecting crafts. For the coastal areas in the country fishery may be a very useful craft or work experience. Similarly coir work would be a good craft for Kerala, wool for Kashmir and Bikaner (Rajasthan).

In this connection the suggestions made by Dr. Morgan* for possible work experience in rural parts are quite stimulating. Dr. Morgan suggests important vocational subjects like soil improvement and land reclamation, food processing, ocean product technology, mineral processing etc.. These may be developed in a scientific way in selected institutions in the country.

5. Syllabii for different crafts should be prepared stating clearly the objectives of craft education in functional terms, giving functional targets of achievement for different grades, giving specific and clear instructions about the number of crafts to be offered by a school and the number of crafts to be selected by a child, detailed instruction regarding the practice of craft work in the school and the methods of evaluating or assessing craft work. The various States may be involved in the preparation of the syllabii in working out the requirements, in suggesting the utilisation of work experience for education and other related issues. This would help in making craft courses more systematic and scientific.
6. The Central government should work out some schemes of encouraging experimentation in crafts and preparation of literature. This is being already done under some schemes of the Ministry of Education. More schemes should be initiated in this direction.
7. Series of experiments in developing new crafts should be taken up by a Central agency. The National Institute of Basic Education has done pioneer and significant work in this direction. The institutes' craft section should be strengthened for enabling it to further its work on these lines.
8. There is a great need of educating public opinion for providing work experience in education. Steps should be taken to effect change in attitude of the public towards crafts. An effective method would be to make the work experiences significant so that these are realised by the students and the parents. Use of mass media should also bs made in this direction.
9. A scheme of giving grants-in-aid to certain institution may be worked out. Some good schemes can be worked out to provide international and national cooperation for this work. Grants may be given in terms of craft equipment and tools, which may be tried out and used in the various states.
10. A scheme of setting up library of tools in each district may be worked out by the Central Government and the States may be given grant to undertake such a project. The main aim of the libraries may be to provide all kinds of tools, some of which can be duplicated and many sets may be prepared by the various agencies. This is likely to encourage students of secondary schools and adults in adult classes to use tools for production work and developing craft skills.

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* *Higher Education in Relation to Rural India*, published by Hindustani Talimi Sangh.

11. Some central agency like the National Institute of Basic Education may take up the work of setting up good model training programmes by working out such programmes with the help and cooperation of people from the various States. These may be tried out in the different States and the results fed back to the National Institute for making improvements.

12. Extension service programmes should be worked out at the National Institute of Basic Education to provide guidance in developing work in crafts in the various training institutions.

13. Some pioneer institutions may be set up which are prepared to undertake experimentation in crafts and a central grant may be created for encouraging such work.

14. The various efforts being made to provide training facilities in crafts, small-scale industries, rural industries or other work experience should be coordinated. For this purpose a coordination committee may be set up on which representatives of the various agencies providing such training may work. This may be a permanent body coordinating such efforts and publishing accounts of training programmes.

II. For the State Governments

15. Crafts should be made compulsory for all the elementary and secondary schools of all kinds. This is already being done but it may be better to set a deadline to do this work. It may, for example, be decided that by the end of the Third Five-Year Plan, no school will be without some craft teaching.

16. State Governments (Education Directorates) should take up work of preparing objectives of craft teaching and syllabii for various crafts or work experiences at the different levels. This should be immediately attended to. The cooperation of the teachers and technical people would be needed in this connection.

17. Steps should be taken to encourage experimentation in new crafts.

18. The status of the craft teachers should be raised. It is a pity that in most cases the craft teacher finds himself in an inferior position in an institution. There should be no difference in the salary and grade given to craft teachers and other teachers, if they are otherwise equally qualified.

19. Steps should be taken to meet the shortage of craft teachers in schools by providing sufficient teachers for the different crafts.

20. Definite plans should be worked out to encourage better people to come as crafts teachers. In this connection some suggestions are given below :

    (a) Craftsmen who are good in their work may be selected and encouraged to study and join the teaching line. This can be done by encouraging village panchayats to select young craftsmen willing to enter teaching line and get education.

    (b) Competions may be held in various crafts and prizes may be awarded to teachers who have high standards of craft work. This would encourage teachers to be more efficient.

    (c) The teachers who get the first prizes may be sent for further training in crafts at the State expense. This would provide a continuous flow of leadership in craft education.

(d) Prizes may be awarded to teachers or schools doing experiments in new crafts or preparing new useful craft equipment. The prize should be such as could be utilised by the individual or the school for continuing work in experimentation in craft or equipment.

(e) Students reading in craft institutions may provide good personnel for craft teaching. For this purpose good students should be selected from such institutions and stipends may be given to them for further education and general pedagogical training.

21. Efforts should be made to improve facilities for training of craft teachers. Some suggestions are given below :—

(a) The State may set up some pioneer training institution having very good facilities for craft training. These institutions may be able to turn out batches of craft educators. It may be useful to attach strong craft training sections to the post-graduate Basic training colleges and to depute promising trained teachers for an intensive training in selected crafts for a minimum duration of six months.

(b) More effective in-service programmes should be organised. These may include part-time training courses and refresher courses in vacation.

(c) The various training facilities existing in the State for providing training to craft teachers may be properly utilised. Perhaps this is not being done for want of proper coordination between the various agencies working in the field. Effective steps should be taken by the State governments to coordinate such efforts being made by the different agencies.

22. A formula should be worked out for providing accommodation for craft work in the different schools. There is a regrettable shortage of space in most cases. Steps should be taken to provide sufficient accommodation for both teaching of crafts and storing of craft products.

23. Many private schools are not able to provide crafts in a proper way for want of financial assistance. Some way should be worked out to give grants to such schools to enable them to provide craft education.

24. Before a particular craft is started in some schools provision should be made for proper equipment needed to run the craft. It is a sad experience that in many schools agriculture is started without the schools having any land or irrigation facilities. This is serious mistake and the State Government should look into this matter.

25. Steps should be taken to prepare list of minimum equipment needed for the various crafts. For this purpose suitable formulae may be worked out and adequate equipment should be provided in the schools.*

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*Suggestions for minimum equipment and materials for wood work, clay modelling ; clay work and pottery ; carving ; book making ; lino pictures and fabric printing—are given at the end of each of the chapters VII, VIII, IX, X, XI and XII of "*Creative Crafts in Education*" by Seonaird M. Robertson (Routledge and Kegan Paul Londan 1955).

26. Training institutions should be encouraged to have facilities for repairing tools for the various crafts. Such provision would be helpful for the training institutions to provide experience in repair of tools to the trainees. The training institutions should be able to help the various schools in their areas to have the tools repaired.

27. The headmasters of the school should be given some powers to make purchases which may be urgently required. For this purpose some contingent funds may be provided.

28. Proper use should be made of available local talents and resources for giving craft or work experience to students. This should not be perfunctory but should be systematic and worked out in details.

29. Raw materials should be provided in time. For this purpose some method should be worked out for the quick supply of raw materials to the schools. One set of practices may not be applicable in all States. The State government should be able to work out these with the help of the persons concerned.

30. The productive aspect of craft should not be neglected. Although craft or work experience should not be dominated by economic motives, the productive aspect which is a necessary part of educative experience should not be lost sight of.

31. Some good methods should be worked out for the disposal of craft products prepared by the students. For this purpose some suggestions are given below :

   (a) The work should be able to provide necessities in the schools like mid-day meals or uniforms.

   (b) Some agency at district level should be set up which may buy all the craft products that are not easily sold and which may take steps to utilise them and sell them for consumption to the various agencies.

III Supervision

32. There should be separate supervisors who may be called craft supervisors or craft organisers to provide guidance to craft teachers and supervise the work of schools and training institutions.

33. Proper facilities should be provided for the training of supervisors. For this purpose some pre-service training facilities in the pioneer institutions may be made. Proper in-service facilities may also be provided.

VI. For the Training Institutions

34. In order that the pupil-teachers going out of the teacher training institutions are able to teach crafts in schools effectively, it is essential that the teacher-training institutions should give serious attention to the teaching of crafts. Besides proficiency in craft skills the pupil—teachers should be given training in the scientific methods of teaching, crafts.

35. The status of craft instructors in training institutions leaves much to be desired. The craft instructors should be well integrated with the staff of the training institutions. Sometimes the craft instructors have Comparatively lower status and this has a bad effect on the craft work done in

the institutions. The training institutes should give the same status to craft instructors as is given to the other members of the staff.

36. The training institutes should select such crafts for their programmes as are usually taught in the schools of that State. Sometimes the training institutions provide crafts which are not practised in the schools. Such a practice has bad effect on the training of teachers and leads to waste of training.

37. Training institutions have a definite responsibility in the preparation of literature for the use of school teachers. This responsibility can be discharged if the training institutions work out systematic programmes of preparing guide books, hand books etc., for the topics which need elaboration and discussion. The experiments being done in the training institutions can be written out and made available to the teachers for their use. The training institutions can also prepare simple reading material for boys on technical aspects of crafts for which literature is not usually available.

38. The craft work should be related to other programmes of the instituitions so that it may become more meaningful.

39. One of the most neglected aspects for craft education in training institutions is instruction about the teaching of crafts. More attentions should be given to the techniques of teaching crafts so that proper skill attitudes work habits and insight are developed. For this purpose the training institutions may have to work out their assignments and even techniques of instruction. This is a new field and training institutions may well learn from one another's experiences. They can hold some common seminars or workshops on this and related programmes.

40. Weightage should be given to the craft work in the total evaluation of the training programme. In many institutions crafts work is not taken into consideration towards the final evaluation of the pupil-teachers. This creates attitude of non seriousness in the pupil-teachers towords craft work. Since craft forms a part of the training programme, it should be given due place in the programme of the institutions.

41. Proper records should be kept for the purpose of evaluation of craft work being done by the pupil-teachers. This would have an added advantage of giving training to the pupil teachers in the maintenance of records which they are usually required to do when they are employed as ragular teachers in the schools.

42. Internal assesment shold be given more importance than the external assesssment in the craft work. It is better to work out criteria of assessing pupil teachers and fixing targets for craft work.

IV. For the Schools

43. The schools should make sure that proper facilities are provided for teaching and learning of craft work. Necessary equipment and sufficient raw materials should be provided in time to the teachers and pupils. Much time is wasted in many schools because of delay in providing equipment and raw materials.

44. The schools should select crafts which are suitable for their locality or with respect to other criteria that are being considered. The schools should also take into consideration the availability of the staff for teaching of crafts which are to be started,

45. The syllabus may be discussed in the staff meetings and worked our in weekly divisions. The basic schools which are following correlated teaching methods should also work out the correlated units. This should be done in a broad way in the beginning of the session and may be revised at the end of each month.

46. Systematic work should be done in laying down targets for craft work in the different grades. Sufficient time should be provided for the craft work.

47. The teacher should clearly know the why and wherefore of craft while teaching the pupils in the different stages. In most cases the teachers tend to teach mechanically and are satisfied with merely giving instruction in craft skills. Since the main aim of education is to provide experiences to children for their development, craft should also aim at contributing to this kind of experience. This is possible if the craft teachers are careful and take pains in knowing the educational and scientific aspects of the crafts.

48. Pupils should be encouraged to participate in all aspects of work in connection with craft teaching. They may, for example, help the teachers in organising the materials in the class, in setting up craft workshops, cleaning the classroom, doing self-evaluation, completing record forms and keeping technical drawings and tool boxes in order.

49. The schools should work out their records to be kept by the pupils and the teachers. The records should be simple and should not take much time for their regular maintenance. These records should be able to help the teachers in evaluating the progress of the pupils.

50. One way of assessing the progress of pupils is through developing a reliable way of raising the pupils. Teachers can get some practice in rating if they define the various aspects that are to be rated and define the various points of the rating scale in functional terms.

51. Due importance should be given to self-evaluation whereby the pupils rate their own performance and are able to find in what aspects they need more improvement.

52. Craft should be considered as an eqnally important subjects for promotion purposes as other subjects are. In some States, there is no examination in craft work and in some other States even if the examination is held the marks are not taken into consideration for the promotion of the pupie This tends to give less importance to craft in relation ls other subjects. Craft should occupy an important place ato should be seriously taken both by the teahers and the pupilnp.

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260. Jordan, Nina R. *Home-made idols in foreign dress.* N.Y., Harcourt

Brace and Co., 1939. XIII, 246 p. Illus.

261. Tearle, eggy. *Flet dolls to make and dress.* Leicester, Dryad. Press, 1958, 58 p.

TEACHING OF HANDICRAFTS

262. Ash, Beryl and Rapaport, Barbara. *Creative work in the junior school.* London, Methuen, 1957. 157 p.

263. Brown, Marnie E. *Elementary handcrafts for elementary schools.* New York, Exposition Press, 1956. 104 p.

264. Dimmack, Max. *Modern art education in the primary school,* Macmillan and Co., 1958. xiii, 149 p.

265. Ericson, Emanuel E. *Teaching the industrial arts.* Peeria, Manual Arts Press, 1946. 384 p.

266. Centanni, Angele C. and Spaulding, B.W. *Industrial art activities for Kindergarten, primary general elementary,* California, The National Press, 1952. V, 35 p.

267. Great Britain Scottish Education Department. *Homecraft in secondary schools.* Edinburgh; His Majesty's Stationery Office, 1951, 16 p.

268. Mocre, Frank C. and others, *Handicrafts for elementary schools. A handbook of practical suggestions for teachers.* Boston, D.C. Heath & Co., 1953. 324 p. Illus.

269. Newkirk, Leuis V. *Integrated Handwork for Elementary schools : Teacher's Guide in use and techniques.* New York, Silver Burett Company, 1940. 342 p.

271. Wankelman, Willarl and others. *Art and crafts for elementary teachers.* Dubuque, (Iowa) William C. Brown Co., 1958 vii. 133 p. Illus.

PERIODICALS ON CRAFTS

1. *Art and Craft Education*
   Evans Bros. Ltd., Montague House,
   Ruseel Square, London,
   Bi-monthly ; 19 sh. 6 d.

2. *Craft Horizons*
   Craft Horizons Inc.,
   New York, U.S.A.

3. *Education Development*
   Mather Bros. (Preston) Ltd.
   192, Stonelow Road,
   Holmsdale, Dronfield
   Near Shiffield, England.
   Quarterly ; 6 sh.

4. *Practical Education and School Crafis*
   23, Brinkburn Drive,
   14 Darlington Co.
   Durham. Great Britain.
   Quarterly 12 sh. 8d.

5. *New Era in Home and School*
   1, Park Crescent, London, W.1.
   Monthly ; 1 £

APPENDICES

APPENDIX I

LIST OF THE ELEMENTARY SCHOOL SYLLABII IN VARIOUS STATES

Andhra : (i) Basic School curriculum and its objectives.

(ii) Syllabus of courses for the lower secondary stage of instruction (Telangana); classes VI, VII, VIII; Govt. of Andhra Pradesh, Board of Secondary Education, 1959.

Assam : Curriculum for Primary, Middle Schools, Middle Madrassas, Middle English & High Madrassas, Sanskrit Middle Schools and High English Schools for boys & girls ; Shillong ; Assam Govt. Press ; 1952.

Bihar : Syllabus for Elementary Schools in Bihar for classes I to VII of Primary, Middle, Basic and High Schools; Secretariat Press, Bihar, Patna; 1959.

Bombay (Crstwhile) :

(i) Revised syllabus for standards I-VIII (Primary, Basic and Secondary Schools); Poona ; 1956.

(ii) Revised syllabus in Basic crafts and community living; (Supplement to the revised syllabus for standards I-VII) ; Primary, Basic & Secondary Schools, Govt. of Bombay; 1957.

(iii) Middle Schools Syllabus of Studies; classes V-VIII; 1959 edition; Vidarbha Board of Secondary Education; Bombay State; Nagpur, 1959.

Jammu & Kashmir : Syllabii for classes I to VIII; Researrh & Publication Department, Directorate of Education; Jammu & Kashmir.

Kerala : Syllabii for Primary classes (standard I to VIII); Government of Kerala; Education Department; 1958.

Madhya Pradesh : (i) Curriculum for primary and lower secondary classes, Part I; Classes I to V; Bhopal; 1960. (In Hindi)

(ii) Curriculum for primary and lower secondary classes, Part II; classes VI to VIII; Bhopal ; 1960. (In Hindi).

Madras : Revised syllabuses for standards I to VII; Integrated Elementary Course; Govt. of Madras; 1959.

Mysore : (i) Primary School curriculum Standards I and II; Govt. of Mysore; Deptt. of Public Instruction, 1959.
(ii) PrimarySchool Curriculum, Standards III & IV, Govt. of Mysore, Deptt. of Public Instruction; 1959
(iii) The Revised Primary School Syllabus for standards V, VI & VII; 1960.

Orissa : (i) Modified syllabus for primary schools, approved by Govt. of Orissa, Education Department, 1952.
(ii) Courses of Study for classes VI & VII; Board of Secondary Education, Orissa.

Punjab : Detailed syllabii of different subjects for the junior Basic, Primary and Middle departments of recognised schools for boys & girls in the Punjab (India), approved by the Punjab Govt., Chandigarh; 1956.

Rajasthan : (i) Curriculum for Classes I to V ; Education Deptt., Rajasthan ; 1957-58. (In Hindi).
(ii) Curriculum for Classes VI to VIII ; Education Deptt., Rajasthan ; 1957-58. (In Hindi).

Uttar Pradesh : (i) Curriculum for Basic School Classes I to V for girls and boys ; U.P. ; Lucknow ; 1954. (In Hindi)
(ii) Curriculum for Junior High Schools classes VI, VII and VIII for Boys & Girls; U. P.; Fourth Edition, 1958

West Bengal : Primary School curriculum ; Junior Basic Department, West Bengal, Education Directorate. (In Hindi).

Delhi : (i) Syllabii & courses for recognised schools in Delhi Administration; Vol. 1.; Primary classes I to V; 1960.
(ii) Syllabii & courses for recognised schools in Delhi Administration; Vol. II; Middle classes VI to VIII; 1960.

Himachal Pradesh : (i) Curriculum for Primary Classes ; Himachal Pradesh Territorial Council ; Education Deptt. (In Hindi).
(ii) Curriculum for Middle Classes : Himachal Pradesh Territoriai Council ; Education Department. (In Hindi).

APPENDIX II

LIST OF THE SECONDRY SCHOOL SYLLABII IN VARIOUS STATES

1. Bombay : Secondary Schools Certificate Examination Board; Subjects and Papers for the S. S. C. Examination; Poona; April, 1960.

2. Jammu and Kashmir : Syllabuses and courses of studies for the Matriculation examination 1959; The University of Jammu and Kashmir, Srinagar.

3. Kerala : Syllabus for Standard XI under Elective System; Government of Kerala, Education Department ; 1958.

4. Madhya Pradesh :
   (i) Prospectus for 1962; High School and Intermediate Examination; Board of Secondary Education, Madhya Pradesh, Sub-Office, Gwalior.
   (ii) Prospectus for the Multipurpose Higher Socondary and Higher Secondary School Certificate Examination.—'A' course, 1962; Mahakoshal Board of Secondary Education, Madhya Pradesh Jabalpur; 1959.

5. Madras : Revised syllabuses for Secondary and Higher Secondary Course; Supplement to Part I—B of the Fort St. George Gazette; 1958.

6. Mysore : Draft Curriculum for Higher Secondary and Multipurpose High Schools; Department of Education ; Government of Mysore; 1958

7. Orissa :
   (i) Courses of Studies for the High School Certificate Examination, 1961, Board of Secondary Education, Orissa.
   (ii) Courses of Studies for the Higher Secondary School Certificate Examination, 1962.

8. Punjab : Regulations, outlines of test and syllabuses in the various subjects for the proposed Higher Secondary Scheme as recommended by the School Board etc., Punjab University Chandigarh; May 1957.

9. Rajasthan :
   (i) Multipurpose and Higher Secondary School, Courses of Studies; Optional group—'crafts'.
   (ii) Multipurpose and Higher Secondary School. Courses of Studies; Optional Group—'technical'.
   (iii) Prospectus of the Higher Secondary Examination of the Board of Secondary Education, Rajasthan for 1962; 1959.

10. Uttar Pradesh: Syllabus of the Board of High School and Interme-

diate Education, U. P., for 1961, for the High School, Intermediate Examination, High School Technical Examination and the Intermediate Technical Examination.

11. West Bengal : (i) Curriculum and syllabuses for School Final Examination, 1959 : Board of Secondary Education, West Bengal, Calcutta.

(ii) Curriculum and syllabuses for Higher Secondary Course; Board of Secondary Education, West Bengal, Calcutta.

12. Delhi : (i) Prospectus : Higher Secondary Examination : 1958; Three-year course of the Board of Higher Secondary Education, Delhi.

(ii) Prospectus of the Higher Secondary Technical Examination, 1959, (Three-year course) of the Board of Higher Secondary Education, Delhi.

(iii) Prospectus for the High School Examination of the Board of Higher Secondary Education, Delhi for 1959.

APPENDIX III

QUESTIONNAIRE ON THE POSITION OF CRAFT TEACHING IN SECONDARY SCHOOLS

1. *Name of the School*
   (With full address)

2. (a) Is it a High School/Higher Secondary school/Multipurpose school ?
   (Score out the alternatives which do not apply).
   (b) Is it a boys/girls/co-educational institution ?

3. In which classes are crafts taught as a part of the curriculum ?
   (Please place a tick mark against the appropriate classes)
   Class VI ____________
   Class VII ____________
   Class VIII ____________
   Class IX ____________
   Class X ____________
   Class XI ____________

4. Is craft a compulsory/optional part of the curriculum ?

5. What are the crafts provided in the school ?
   (1)
   (2)
   (3)
   (4)
   (5)
   (6)
   (7)

5. (a) Are the crafts provided in the school linked with those practised in the surrounding area ?

Yes/No

6. What are the objectives in introducing craft education in the curriculum ?

(Please place a tick mark against the appropriate statement (s).)

(a) Contributes to the leisure time activities of pupils ____________

(b) provides vocational outlet to pupils ____________

(c) enables them to gain manipulative skills ____________

(d) inculcates dignity of labour ____________

(e) explores their aptitude and interests

(f) makes them appreciative of craft products

(g) give them confidence to use inexpensive and locally available material

(h) offers opportunity of guided exploration and experimentation in practical situations

(i) provides specialised experiences to pupils with special interests, skills and talents to further develop these abilities

(j) makes them better householders in the matter of minor household repairs.

7. To what extent are these purposes fulfilled in the actual teaching of the crafts in your school ?

8. How many hours of week are devoted to craft teaching ?

9. Are the class periods of sufficient length ?

Yes/No

The period is of.......................... minutes' duration.

PHYSICAL FACILITIES

10. What is the average size of each craft class ?

11. Is it commensurate with the nature of work to be done ?

Yes/No

12. Are the craft classes conducted in a room set apart for the purpose ?

Yes/No

13. Does the room provide adequate space ?

Yes/No

14. Is the room well-lighted and otherwise suitable ?

Yes/No

14: Are adequate storage facilities available for pupils' handiwork, general material and supplies ?

Yes/No

16. Are adequate working facilities available in the form of

Work benches	Yes/No
Tables	Yes/No
Easels	Yes/No
Tools	Yes/No
Show-cases	Yes/No
Display boards	Yes/No
Raw Material	Yes/No

17. Are materials and equipment efficiently used ?

Yes/No

18. Are raw-materials made available to pupils in time ?

Yes/No

19. Do students work individually/in groups ?

20. Is each student provided with his own set of tools ? If not, with how many has he to share it ?

21. What percentage of students, if any, possess their own tools at home ?

22. Is the workshop kept open for pupils outside regular hours ? If so. for how long ?

23. What percentage of students use the workshop outside the course of studies ?

24. What percentage of students persue the craft at home for pleasure ?

25. On what reason is the students' choice of craft based ? (Place a tick mark against the appropriate column).

(1) the choice provided in the school ______________
(2) his own aptitude ______________
(3) hereditary craft in the family ______________
(4) parents' choice ______________
(5) teachers' choice ______________
(6) accidental ______________

26. How many crafts can a student offer at one time ?

27. For how many years does he study the craft compulsorily ?

No. of years ______________

From class ______________ to class ______________

28. Is a change of craft possible during the secondary school course ?

Yes/No

If so, at what stage ?

STAFF

29. How many teachers are employed in the school for each craft ?

	Craft	*No. of teachers*
(1)		
(2)		
(3)		
(4)		
(5)		

30. Is the staff adequate for each of the crafts ?

Yes/No

31. Have the teachers received institutional training in crafts ?

Yes/No

32. What is the qualification prescribed by the State for each kind of craft teacher ?

Designation	Craft taught	Educational qualifications	Professional qualifications	Pedagogical qualifications
1.				
2.				
3.				
4.				
5.				
6.				
7.				

33. What are the institutions in the State that provide craft-cum-pedagogical training ?

1.
2.
3.
4.
5.
6.
7.

34. Do you experience difficulty in securing craft teachers who know their subject satisfactorily ?

Yes/No

35. Do you experience difficulty in securing craft teachers who are pedagogically trained ?

Yes/No

36. Are untrained and unqualified artisans employed in the school ?

Yes/No

37. What are the scales of pay of craft teachers ?

	Designation	Craft taught	Scales of Pay
1.			
2.			
3.			
4.			
5.			
6.			
7.			

38. Are craft teachers acquainted with the modern practices in the teaching crafts—or do they follow the traditional methods?

39. Do the craft teachers participate in community craft activities ?

CURRICULUM

40. Does the content of the craft curriculum include
    - (a) manipulative skill Yes/No
    - (b) a study of the economics of the craft Yes/No
    - (c) the scientific basis of the craft Yes/No
    - (d) the application of the craft in daily life Yes/No

41. Is the curriculum integrated with
    - (a) home and community experience Yes/No
    - (b) other subject areas in the programme of studies Yes/No
    - (c) co-curricular activities Yes/No

42. Does it stress the creative aspects of crafts ? Yes/No

43. Does it stimulate interest in the pupil and prepare him for craft pursuits beyond the secondary school ? Yes/No

INSTRUCTION

44. Are field trips conducted to places of interest from the standpoint of craft education ? Yes/No

45. What special steps are taken to promote craft work ?

INSTRUCTIONAL MATERIALS

46. What instructional materials are provided for craft instruction under the following categories ?

(Please attach separate lists, if space is not adequate)

(a) Text books

(b) Reference material

(c) Periodicals

(d) Teachers' file of material

(e) Pupils collection of craft designs and materials

(f) Craft models and charts

(g) Any other

EVALUATION

47. How is pupil progress evaluated ? (Place a tick mark against the appropriate answer).

By maintaining a record of pupil progress ______

By evaluating creative ability ______

By evaluating technical competence ______

By evaluating quantitative turn-over ______

48. Is craft work assessed by internal and/or external assessment ?

49. Are examinations held in the craft ? If so, how often are they held in the year ?

50. What is the composition of each examination ?

	No. of papers	Duration	Marks
Theory			
Practical			
Viva Voce			

51. Is a minimum number of marks prescribed for a pass ? Yes/No

If so, what is it ?

52. Is the pupils' achievement in crafts taken into consideration in deciding his total progress and his promotion to the next class ?

53. What is the size of funds available for craft programme each year ?
Recurring
Non-recurring

54. Is the amount adequate ?

55. How are the articles produced by pupils disposed of ?

56. Please mention any other special features about craft instruction in your school.

57. What are your suggestions for bringing about improvement in craft instruction ?

58. Please attach the following statements.

(1) The number of students studying each craft from Standard IX to XI, or where the higher secondary school is from Standard VIII, from Standard VIII to Standard XI.

(2) Statement showing the position of staff for craft instruction in the following form.

Name of Craft	Designation of teacher	Educational and professional qualifications	Whether qualified according to precribed regulations.

(3) List of equipment provided in the school for each craft.

Signature of Headmaster

Place

Date

APPENDIX IV

Proforma sent to the State Departments of Education

Name of the State

Sr. No.	Information required	Primary Stage		Middle Stage		Secondary Stage				
		Junior Basic schools (Classes 1-5)	Non-Basic Primary schools (1-5)	Senior Basic schools (6-8)	Non-Basic Middle schools (6-8)	High schools (9-10)	Higher Secondary schools (9-11	Multi-purpose school (9-11)	Post-Basic schools (9-11)	Public schools (1-11)
1.	Indicate by putting √ mark under each of the stages and types of schools in which craft is introduced and taught.									
2.	Give the list of crafts taught at various stages in the different types of schools. In case different crafts are practised in rural and urban schools or in boys and girls schools, please list them separately for each types of school under different stages.									
3.	What are the objectives of introducing and teaching craft at each stage in the different types of schools ?									

Sl. No.	Information required	Primary Stage		Middle Stage		Secondary Stage				
		Junior Basic schools (Classes 1-5)	Non-Basic Primary schools (1-5)	Senior Basic school (6-8)	Non-Basic Middle schools (6-8)	High schools (9-11)	Higher Secondary schools (9-11)	Multi-purpose schools (9-11)	Post Basic schools (9-11)	Public schools (1-11)
4.	**Is craft a compulsory or optional subject ?**									
5.	How much time (in hours) is allotted to the teaching and practice of craft work per week in the school timetable ?									
6.	**Is craft an examination subject ?**									
7.	**If answer to 6 is yes, what percentage of marks are allotted to craft work in the examinations for annual promotion ?**									
8.	**Which of the following methods of assessment are adopted in your schools ? What weightage is given to each of these methods in the annual assessment ?**									
	(a) Record of child's continuous performance in craft work.									

Sl. No.	Information required	Primary Stage		Middle Stage		Secondary Stage				
		Junior Basic schools (Classes 1-5)	Non-Basic Primary schools (1-5)	Senior Basic schools (6-8)	Non-Basic Middle schools (6-8)	High schools (9-11)	Higher Secondary schools (9-11)	Multi-purpose schools (9-11)	Post-Basic schools (9-11)	Public schools (1-11)
	(b) Internal examination :									
	(i) Theory									
	(ii) Practical									
	(c) External examination :									
	(i) Theory									
	(il) Practical									
	(d) Any other									
9.	Is craft taught as an isolated subject or does it form the centre of correlating other knowledge ?									
10.	Are there any specifications laid down for :									
	(a) accommodation—craft wise per school ?									
	(b) If so, what are the specifications ?									

Sl. No.	Information required	Primary stage		Middle stage		Secondary Stage				
		Junior Basic Schools (Classes 1-5)	Non-Basic Primary Schools (1-5)	Senior Basic Schools (6-8)	Non-Basic Middle Schools (6-8)	High Schools (9-10)	Higher Secondary schools (9-11)	Multi-purpose schools (9-11)	Post-Basic Schools (9-11)	Public schools (1-11)
11,	Approximately what percentage of schools in actual fact have the accommodation facilities according to the specifications stated ?									
12.	Please give the lists of equipment, craft-wise, supplied to schools (You can give this as an appendix if the list is long).									
13.	What formula is developed for calculating the equipment needs of schools ?									
14.	Approximately what percentage of schools have actually got the equipment according to the formula stated in answer to 13 above ?									
15.	Does the Deptt. itself supply the equipment or does it authorise the individual									

Sl. No.	Information required	Primary Stage		Middle Stage		Secondary Stage				
		Junior Basic schools (Classes 1-5)	Non-Basic Primary schools (1-5)	Senior Basic schools (6-8)	Non-Basic Middle schools (6-8)	High schools (9-10)	Higher Secondary schools (9-11)	Multi-purposer schools (9-11)	Post-Basic schools (9-11)	Public schools (1-11)
	schools to make their own purchases or does it require the pupils to bring their own equipment ?									
16.	Do the schools got the equipment in time? If not state reasons for delay.									
17.	Repair facilities for craft equipment :									
	(a) Is some contingent fund supplied to the schools for the repair of craft equipment ? If so how much ?									
	(b) Is there any agency, government/ non-government, which is entrusted with the responsibility for repair of craft equipment of the school ? If so, give the name of the agency.									

Sl. No.	Information required	Primary Stage		Middle stage		Secondary Stage				
		Junior Basic schools (Classes 1-5)	Non-Basic Primary schools (1-5)	Senior Basic Schools (6-8)	Non-Basic Middle schools (6-8)	High schools (9-10)	Higher Secondary schools (9-11)	Multi-purpose schools (9-11)	Post-Basic schools (9-11)	Public schools (1-11)
	(c) Do the schools manage their own repair of the craft equipment ?									
	If so, do they have any workshop facilities to do this ?									
	(d) Do the neighbour-schools mutually help one another in this respect ?									
	Supply of raw material :									
	(a) How do you calculate the raw material needs per school ? State the formulae craftwise.									
18.	(b) Approximately what percentage-of schools actually receive raw material according to formulae, stated by you in response to above.									

Sl. No.	Information Required	Primary Stage		Middle Stage		Secondary Stage				
		Junior Basic schools (Classes 1-5)	Non-Basic Primary schools (1-6)	Senior Basic schools (6-8)	Non-Basic Middle schools (6-8)	Hjgh schools (9-10)	Higher Secondary schools (9-11)	Multi-purpose schools (9-11)	Post-Basic schools (9-11)	Public schools (1-11)
	(c) Does the department itself supply the raw-material or does it authorise the individual schools to make their own purchases or does it require the pupils to bring their own raw-materials?									
	(d) Is the raw material supplied in time? If not. state reasons for delay.									
	(e) At what time of the year is the raw-material supplied?									
19.	Disposal of finished products:									
	(a) What arrangements do the schools have for stering the finished craft products?									

Sl. No.	Information required	Primary Stage		Middle Stage		Secondary Stage				
		Junior Basic schools (Classes 1-5)	Non-Basic Primary schools (1-5)	Senior Basic schools (6-8)	Non-Basic Middle schools (6-8)	High schools (9-19)	Higher Secondary schools (9-11)	Multi-Purpose schools (9-11)	Post-Basic schools (9-11)	Public schools (1-11)
(b)	How are the finished craft products disposed of?									
(c)	If sold, what is the basis for determining the sale price?									
(d)	Does the state department or the management of the school have any economic expectations from the craft work done in schools?									
(e)	How is the income from the disposal of craft products utilised?									
(f)	What is the actual average income from the disposal of craft products per school?									

Sl. No.	Information required	Primary Stage		Middle Stage		Secondary Stage				
		Junior Basic schools (Classes 1-5)	Non-Basic Primary schools (1-6)	Senior Basic schools (6-8)	Non-Basic Middle schools (6-8)	High schools (9-19)	Higher Secondary schools (9-11)	Muiti-purpose schools (9-11)	Post-Basic schools (9-11)	Public schools (1-11)
20.	Craft teacher:									
	(a) What is the basis or the formula for the supply of craft teachers to the schools ?									
	(b) What is the actual position regarding the supply of craft teachers for schools?									
	(c) What are the qualifications — (academic and professional) laid down for the craft teachers ?									
	(d) What percentage of craft teachers are actually trained in craft work ?									
	(e) What percentage of craft teachers in girl's schools are women ?									

Sl. No.	Information required	Primary Stage		Middle Stage		Secondary Stage				
		Junior Basic schools (Classes 1-5)	Non-Basic Primary schools (1-5)	Senior Basic schools (6-8)	Non-Basic Middle schools (6-8)	High schools (9-11)	Higher Secondary schools (9-11)	Multi-purpose schools (9-11)	Post-Basic schools (9-11)	Public schools (1-11)
	(f) What are the salary grades of craft teachers ?									
	(g) Where have the craft teachers working in different types of schools been trained ? Also mention the level of training essential for the craft teachers working in the different types of schools ?									
21.	Who supervises the day-to-day craft work in schools ?									
22.	What arrangements are there for the supervision and inspection of craft work at the level of the education department ?									

23. *Training facilities*: How many different types of institutions, do you have in your State, which offer some kind of training for craft teachers? Give below the list of such institutions, the level of training (duration of training) provided by each, the minimum qualification essential for admission, the name of the agency sponsoring each of these training institutions and their capacity of intake.

Name of the Institution	Level of training provided	Minimum qualifications essential for admission	Agency sponsoring the institution	Capacity of intake	Craft or work in which training is offered

24. Budget for crafts

(A) What percentage of the total educational budget is allowed to craft education including craft work in schools, training of craft teachers and Supervisor of craft work ?

(B) How is the budget alloted to craft education divided among the following items :

(i) Craft equipment and raw materials
(ii) Reports of craft equipment or contingency if any
(iii) Teacher's salary
(iv) Training of Teachers
(v) In-service training of craft teachers
(vi) Inspection and administration of craft work in schools.

25. Please indicate briefly some of the outstanding problems of craft teaching in schools (at various levels) and offer suggestions for adopting crafts and improving their teaching wherever they are introduced.

APPENDIX V*

Crafts taught in various Countries

The following table indicates the various crafts taught to boys and to girls in some countries :—

Country	Boys	Girls
Argentina	Bookbinding, Woodwork.	Needlework, Domestic Science, Bookbinding.
Australia	Woodwork, Metalwork, Farm Mechanics.	Needlework
Austria	Stencilling, Linocutting, Cardboard work, Bookbinding, Modelling, Woodwork, Metalwork, Gardening.	Needlework
Belgium	Cardbord work, Modelling in the Round, Woodwork, Metal work.	As for boys
Burma	Woodwork, Metalwork, Cane and Bamboo work.	Needlework, Weaving, Pottery
Canada :		
Alberta	Leather work, Pottery, Slate Art, Metalwork, Woodwork.	—
British Columbia	Woodwork, Metalwork, Modelling (clay and soap), Photography, Costume and Poster Design.	—
Manitoba	Cardboard Work, Bookbinding, Leather Work, Linocutting, Woodwork, Metal Work.	Needlework, Weaving.
Nova Scotia	Woodwork, Metalwork.	—
Ontario	Modelling, Wood and Soap-carving, Stage Art, Textile printing, Pottery, Weaving, Carpet making, Bookbinding, Metalwork.	Certain Art Courses as for boys ; Needlework.

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*From : "The Teaching of Handicrafts in Secondary Schools"—Internationai Bureau of Education, Geneva, Pub. No. 123, 1950)

Country	Boys	Girls
Canada :		
Saskatchewan	—	Hobbies : Leather work, Embroidery. Shell work.
Ceylon	Woodwork (and occasionally Casketry, Leather-work, Metal work).	Weaving
Chile	Cardboard work, Bookbinding, Woodwork.	Needlework
Czechoslovakia	Gardening, Woodwork, Models, Car-driving, Cooking, Tailoring (in 'work groups')	As for boys ; Needlework, Demestic Science.
Denmark	Woodwork (Slojd)	—
Ecuador	Bookbinding, Geometrical and Geographical Modelling, Work on natural resources.	Domestic Science
Egypt	Fretwork, Metalwork, Modelling, Leather-work, Weaving, Carpet making.	Needlework
Finland	Cardboard work, (incl. Woodcarving), Metal-work, Making model aeroplanes, Physics Apparatus, etc.	Needlework
France	Cardboard Work, Woodwork, Metalwork, Assembling Machinery, Installing Electric Light.	Needlework, Domestic Science, Child care.
Holland	Cardboard Work, Modelling, Woodwork.	As for boys
Honduras	Modelling, Weaving, Basketry, Woodwork, Metalwork, Bookbinding, Soap-making, Brushmaking, Pottery, Tanning, Preserving.	Needlework, Tailoring, Millinery, Flower-making.
India :		
W. Bengal	Cardboard Work, Modelling, Woodwork.	Needlework
Madras	Gardening, Agriculture, Woodwork, Weaving.	Domestic Science
Central Provinces & Behar	Modelling, Cardboard Work, Basketry, Weaving, Woodwork, Metalwork.	Needlework, Domestic Science.

Country	Boys	Girls
Ireland	Woodwork, Tree Study,	—
Israel	Cardboard Work, Woodwork, Metalwork, Electricity.	Needlework, Weaving. Domestic Science.
Korea	Woodwork, Bamboo—Work, Metalwork, Machinery, Use of Plaster and Cement.	As for boys
Lebanon	Copper Work, Electrical Installation.	Needlework.
Luxemburg	Science Apparatus, Classroom Decoration.	Needlework, Domestic Socience, Child care.
Nonaco	Cardboard work, Woodwork, Metalwork.	Needlework, Domestic Science, Child Care.
New Zealand	Woodwork, Metalwork, Leather work, Bookbinding, Weaving, Carpet making, Block printing, Pottery.	As for boys
Norway	Cardboard work, Woodwork, Metalwork.	Needlework
Panama	Cardboard work, Modelling, Woodwork, Metalwork.	Domestic Science
Persia	—	Needlework, Domestic Science.
Portugal	Modelling, Cardboard work, Feltwork, Woodwork, Linocutting, Models.	As for boys (except Models)
Salvador	Apparatus, Cardboard work, Bookbinding, Woodwork, Metalwork.	As for boys
Sweden	Woodwork, Metalwork, Bookbinding.	Needlework
Switzerland :		
Basel city	No fixed syllabus	Needlework
Geneva	Cardboard work, Woodwork, Metalwork.	Needlework, Domestic
Neuchatel	Woodwork (incl. Woodcarving), Metelwork.	Cardboard work, Raffia work, Basketry, Leather work.
Zurich	Modelling, Woodwork (incl. Woodcarving). Metalwork.	Needle work

Country	Boys	Girls
Syria	—	Needlework, Domestic Science.
Thailand	Bamboo work, Modelling, Woodwork, Gardening.	Needlework, Work with banana-leaves, Candle-making.
Turkey	Cardboard work, Woodwork, Metalwork, Modelling, weaving.	Needlework, Domestic Science, Child care.
Union of South Africa :		
Care Province	Woodwork, Metalwork	Needlework
Natal	Woodwork, Metalwork, Bookbinding, spinning, Weaving, Modelling, Lino-cutting.	Domestic Science
Orange Free State	Wood work	Needle work
Transvaal	Woodwork, Metalwork.	Needlework, Domestic Science.
United Kingdom :		
England & Wales	Woodwork, Metalwork, Bookbinding, Block printing, Textile Printing, Pottery, Plastics.	As for boys (except Woodwork and Metalwork), Needlework.

APPENDIX VI

TRAINING FACILITIES IN COTTAGE CRAFTS*

A State-wise list

State	Cottage crafts
1. Andhra Pradesh	Coir goods manufacture, cutting and tailoring, embroidery and needle work, glass beads and bangles manufacture, pottery, rattan work, toy making, oil pressing, spinning and weaving, cotton and rope making, cane work, hosiery manufacture, dyeing and printing, dyeing, weaving, dyeing and hosiery, castor farming and Eri silk rearing, bamboo industries, weaving, dyeing, printing and hosiery, soap manufacture, hand-loom weaving, carpentry, blacksmithy, leather work, weaving and pottery, Craft, carpentry, ceramics.
2. Bihar	Bamboo and cane industry, basketry, bee-keeping, brass-metal, calico printing, carpet and durri making, ceramics, charkha spinning, cotton weaving, cutting and tailoring, doll and toy making, dyeing, embriodery and needle work, glass and bangle making, handloom weaving, knitting, newar weaving, oil pressing, palm gur industry, pottery, rope making, silk weaving, silk weaving and dyeing, soap, disinfectants, boot polish, candles and cosmetics making, soap making, spinning and weaving, stone ware, tasar reeling and spinning, village industry, wool weaving, zari work.
3. Kerala	Agarbathi and mat weaving, book binding, bamboo work, rattan work, coir training, coir work, mat making, glass manufacturing, toy making, soap making, silver smithy, candle making, crafts, poultry-cum-bee-keeping, manufacture of sports goods, blacksmithy, bell metal training, manufacture of plastic wares,

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*Compiled from "*A Handbook on Training Facilities in India*"—Part I. Issued by The Occupational Information Unit, Directorate-General of Employment and Training, Ministry of Labour and Employment, Government of India.—December 1960.

State	Cottage crafts
	cycle parts, cutting and tailoring, tailoring and garment making, cutting, tailoring and dress making, embroidery and garment making, needle work and garment making, knitting and crochet making, spinning (Ambar Charkha), spinning (Kissan Charkha), weaving, spinning and weaving, weaving and needle work, weaving, carpentry and coir work, weaving crochet, knitting embroidery and pillow-lace work, weaving and mat making, weaving, mat making and smithy, weaving, spinning and coir work, dyeing and printing.
4. Madhya Pradesh	Ambar charkha training, bamboo work, bamboo and cane work, bee keeping, bleaching, dyeing and calico printing, brush making, cane work, cane works and basketry, embroidery, fibre articles, glass industry, grass mat training, hosiery, lac industry, oil pressing, palm leaves articles, paper pulp toys; pottery, preservation of fruits, printing and dyeing (Artisans' course), screwpine work, soap industry, soap stone industry, spinning and weaving, spinning (wool), sports goods, tailoring, tailoring and embroidery, training in carpet and duree manufacture, toy and lacquer work, toy making, weaving, weaving (wool).
5. Madras	Ambar charkha training, Ambar Karyakartha course, book binding, cutting and tailoring, dyeing, bleaching and printing, embroidery, embroidery and dress making, embroidery and needle work and dress making, enamel work, goldsmithy, hand weaving, handloom weaving, home science, Khadigramodyog training, Khadi workers, knitting, lace making, needle work and dress making, needle work, dress making, embroidery and weaving, paper making, sewing, sheet metal work, spinning (Ambar Charkha), spinning and bamboo work, spinning and weaving, tailoring, village industries, weaving.
6. Mysore	Bleaching, dyeing and printing, cane and bamboo work, cane willlow and bamboo work, coir extraction and spinning, coir work, cutting and tailoring, embroidery, pottery work, Rattan

State	Cottage crafts
	work, spinning and weaving, spinning, weaving and dyeing, tailoring, embroidery, zari and nukki, knitting and agarbatti making, weaving, weaving and dyeing, weaving, dyeing, printing and hosiery manufacture, weaving leather work, smithy and carpentry.
7. Punjab	Ambar Charkha, Bookbinding, cane, willow and bamboo work, carpet making, cutting and tailoring, Durries, carpet and niwar making, dyeing and printing, embroidery, hosiery manufacture, ink and chalk making, knitting, namda making, painting, plastic goods manufacture, soap making, spinning and weaving, sports material manufacture, tailoring and embroidery, toy making, utensil making, weaving and dyeing.
8. Rajasthan	Bamboo and basketry, bamboo and cane work, chick and muddha, cutlery work, cutting and tailoring, durry, carpet and niwar making, hair oil, chalk and ink manufacturing, *moonj ban* making, plastic toys and stationery making. soap making, tailoring, toy making, weaving.
9. West Bengal	Badminton shuttle-cock manufacture, bakery, basketry, bee keeping, braiding, brass engraving, cane work cane and bamboo work, carpet and sataranchi making, ceramics, clay modelling, coir work, confectionery, toy making and designing, cord making, cutting and tailoring, dyeing and printing, embroidery and cutting, embroidery and knitting, embroidery and sewing, ghani, ink making, jeelly (paper and chanachur) Making, knitting, mat making, match making, needle work, paper making, paper and clay modelling, pottery work, soap making, spinning, spinning and weaving, shola goods manufacturing, toy making, umbrella making, weaving, weaving, dyeing and printing, commercial art, librarianship, music, painting and decoration, painting and decorating, painting and drawing, special art, teachers' trainig.

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Page	Para	Line	Read	For
1	2nd	9	Subjects	Subjeats
1	3rd	2	It	I
	—	15	Yes	Yest
2	2	3	In	In
7	5	4	because	tecause
8	—	3	early	earlyl
8	—	4	manual	Mannay
8	—	5	purely	purelis
8	—	6	the	tha
8	—	7	civilization	civillzintion
8	—	8	in	he
8	—	10	the	tal
8	—	12	response	responds
12	3	9	productive	pruductive
13	1	1	adoption	doption
16	1	5	university	univerity
17	1	1	commission	cammission
25	—	12	in	is
26	1	10	more	mere
32	—	Table I	18	88
	Page 46. Line Ist. Read I as √ In Table 6 read I against Andhra as √ under Junior Basic Schools. Read all I, s in Bihar, Gujarat, Madras, Maharashtra, Orissa, Uttar Pradesh and W. Bengal as √			
53	—	1	important	mportant
53	1	10	farm	form
53	1	11	as	also
Page 55 read R against West Bengal under Higher secondary.				
60	—	1	objectives	objective
60	—	1	in	since
61	—	1	Schools	chools
61	—	2	schools	Sc hools
66	Table 17	1	Yes answers	yes answers in affirmatlve
67	3	5	raw materials	rawmaterials
67	5	10	periodicals, although	periodicals. Although
77	Heading	3	Elementary school syllabii	Elementary syllabii
81	1	8	embroidery	emboridery
89	6	3	basis	aasis

Page	Para	Line	Read	For
92	6	3	Mallepalli	Nallapalli
92	6	4	Maredpalli	Naredpalli
92	6	5	Rajahmundry	Rajahmundhari
93	Table 22	—	Tape making	Tap making
105	6	3-4	Matriculate teachers	Matriculates teachers
107	I under Madhya Pradesh	2	one school	one schools
108	3	2	these	theis
108	3	3	class	clase
108	3	4	change is possible	change possible
113	5	5	to have	have
117	I	8	craft	crafts
122	—	—	Table—28	Table 23
125	6	4	recourse	resourse
127	Table 29 under craft	—	Tape making	Tap making
131	—	Last line	experimentation ;	experiementation ;
132	2	3	at all	a all
133	2	3	in	In a
133	4	4	the	the r o
135	I	I	are	is
135	I	3	purposes	purpores
135	Table 31	—	I against music under B, High school	—
136	4	5	aptitudes	ptitudes
138	5	4	them	tkem
141	3	2	This is	this
143	I	9	cottage	college
148	—	13	finishing	finshing
150	—	I	Dyeing	Dying
153	7	6	, (after level)	. (after level)
155	under Uttar Pradesh	6	Dyeing	Dying
156	—	3	willow	willor
156	—	6	dyeing	dying
156	—	28	crafts taught to	ctafts To taught
158	—	11 from below	S.S.L.C.	S.S.L.S.
163	2	3	special	spccial
164	Table 37	3	Junior Technical	Jnior Techical
164	Table 37	5	Naredpalli	Naredplli

Page	Para	Line	Read	For
165	—	Last line	Hebbal	Behhal
169	3	4	educational	educatinal
170	3	1	crafts	erafts
171	5	3	50	so
172	1	9	contradictory	ontradictory
178	1	4	schools	schosls
182	7	6	Out	Ont
182	7	last line	be	the
183	3	last line	necessary	neccsssary
184	2	15	manual	mannal
185	4	3	responsibility	reponslbility
186	—	9	teachers	teachrs
187	4	1 (heading)	size	slze
188	1	3	boarding	boardings
188	3	8	paper	poper
188	Last para	1	examinations	examiaations
191	Last para	5	activities	activies
194	3	10	retarded	retarted
195	1	1	According	Accordiug
197	1	5	desired	disired
202	2	3	the	The
206	4	1	manual	mannual
206	—	33	pottery	poltery
207	2	6	cooperative	cooperation
207	4	1	Manual	Mannual
207	6	2	student	stndent
208	5	3	education	edncation
211	5	3	become	becomes
213	—	Heading (b)	prepared	prcpared
217	4	4	institute's	institutes'
217	6	1	institutions	institution
218	10	8	Competitions	Competions
219	—	6th from below	is a serious	is serious
220	—	2nd from below	low	lower
221	4	4	skills	skill
221	4	5	insights	insight
222	7	2	rating	raising
222	9	1	subject	subjects
222	9	5	pupil	pupie
222	9	6	to	is
222	9	7	and	ato
222	9	8	pupils	pupilnp

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Page	Para	Line	Read	For
(iii)	Bibliography	19	Bureau	Burcau
(iii)	—	26	Tenth	Teeth
(vi)	—	4th from below	Memeographed	Memecgraphed
(vi)	—	2nd from below	handbook	handbooh
(vii)	—	15th	Practical	Practisal
(ix)	—	20	crafts	crofts
(ix)	—	28	Make	Wake
(ix)	—	34	Prentice-Hall	Printice-Hall
(xiv)	—	23	Hindi	HIndi
(xiv)	—	6th from below	Playing	Piaying
(xv)	—	14	Leicester	Leicsster
(xv)	—	23	Faber	Feber
(xvi)	—	3	projects	projeels
(xvi)	—	13	work-room	workers
(xvii)	—	29	Dryod	Dryad
(xvii)	—	32	Macmillian	Macmillia
(xix)	—	2	Weaving	Weaing
(xix)	—	19	preveishka	pveveishka
(xx)	—	5	dictionary	dioticnary
(xxii)	—	21	London	Lcnden
(xxiii)	—	6th from below	Louis	Lcuis
(xxiv)	—	14	Crafts	Craf is
I	Appendix I	I line (under J & K)	Research	Rcsearrh
6	Appondix III	Last Sr. No.	15	14
12	Appendix IV	3rd line Sr. No. 2.	type	types
18	Appendix iv	4th line sr. No. 19 (a)	storing	stering
23	Appendix v	last line	International	Internetionai
24	Appendix v	5	Basketry	Casketry
25	Appendix v	13	Sclence	Socience
25	Appendix v	14	Monaco	Nonaco
25	Appendix v	8th line fron below	Domestic science	Domestic
25	Appendix v	5th line from below	Metai	Metel
25	Appcndix v	3rd line from below	Needle	Necdle
29	Appendix vi	last line	training	trainig

S.C.E.R.T., West Beng
Library